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Provisions for Alternate Grades Implemented in Response to COVID-19

Complete Credit/Credit/No Credit (CCR~/CR~/NCR~) Grading -Undergraduate

In light of the challenging remote instructional environment caused by the COVID-19 pandemic, and in order to moderate student stress while adapting to a new system of course delivery, the University of Montana will implement an alternative grading mechanism effective during the spring semester of 2020. This optional Complete Credit/Credit/No Credit grading mechanism, made available for all courses taken for undergraduate credit, will afford students more flexibility and reorient their focus to achieving course outcomes without the inherent anxiety of traditional letter grades.

A Complete Credit (CCR~) designation reflects performance at any of the levels A, B, or C (C- or above), and designates adequate understanding of the subject matter and adequate preparation for more advanced work in the field. Courses completed with a CCR~ grade will qualify as prerequisites and will satisfy degree or general education requirements at UM or other MUS campuses.

A Credit (CR~) designation reflects minimally acceptable performance at any D level (D- through D+). Courses completed with a CR~ grade qualify as prerequisites and satisfy degree requirements only in those instances where a CR is normally accepted.

The No Credit (NCR~) designation is for work of failing quality (F).

Complete Credit/Credit/No Credit grades do not factor into students' Grade Point Average (GPA). Complete Credit/Credit grades count towards earned semester hours. A No Credit grade does not count toward earned semester hours.

Faculty will grade students as usual per their syllabi grading structure, with an understanding that the transition to remote learning might impact each student differently.

Students have the option of choosing Complete Credit/Credit/No Credit grading for any number of their courses up to seven calendar days after their final grade is posted to their transcript by the Registrar.

UM will include a designation on students' transcripts, indicating the extraordinary circumstances of the global public health emergency during Spring 2020.

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, B, C, D, F) or may discriminate against students who use the CCR~/ CR~/NCR~ option for many courses.

Credit/No Credit (CR~/NCR~) Grading - Graduate

For Spring 2020, due to the COVID-19 outbreak, graduate and professional students may elect to take any graduate level course or any 400-level UG course on a Credit/No Credit (CR~/NCR~) basis, rather than a traditional grade. The only exception is that the CR~/NCR~ will NOT apply to courses for which all requirements were due before spring break (10-week or shorter courses*). CR~ credits will not count toward GPA, but will count toward degree requirements. Students must consult with their academic advisors before making this decision, as different programs will have different concerns about long-term implications of non-graded courses on their transcripts (professional certification, employment opportunities, etc). Faculty will provide traditional grades as normal, but students can elect to opt for "CR~" for grades of C and above; grades of C- or lower will be awarded NCR~.

Students have the option of choosing Credit/No Credit grading for any number of their courses up to seven calendar days after their final grade is posted to their transcript by the Registrar.

UM will include a designation on students' transcripts, indicating the extraordinary circumstances of the global public health emergency during Spring 2020.

Credit/No Credit Grading - Law School

Per faculty mandate, all spring 2020 law grades appear as Credit/No Credit to mitigate the COVID-19 disruption to traditional face-to-face curriculum delivery.

Academics

- Academic Policies and Procedures
- Advising
- Bachelor Degree Admission Entering Freshmen
- Degree/ Certificate Requirements for Graduation
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Academic Policies and Procedures

Registration and Course Information

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 for 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.

Adding, Dropping and Other Course Changes

Adding, Dropping and Other Course Changes Summary Tables

Students must clear all registration holds before registering for classes. 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

					Add/Drop Dates
INSTRUCTIONAL DAYS	**DAY 1-7**	**DAY 8-15**	**DAY 16-45**	**DAY 46-LAST REGULAR CLASS DAY**	**AFTER LAST REGULAR CLASS DAY**
Add a Course	Registration --> Register for Classes	Electronic Override from instructor --> Registration --> Register for Classes	Course Add/Change/Drop link --> instructor and advisor1 approval	Course Add/Change/Drop link --> instructor and advisor1 approval	Only registration errors can be corrected; see Registrar's Office
Change a Section	Registration --> Register for Classes	Electronic Override from instructor then --> Registration --> Register for Classes to finish add & drop	Course Add/Change/Drop link --> both instructors' approvals	Course Add/Change/Drop link --> both instructors' approvals	Only registration errors can be corrected; see Registrar's Office
Drop a Course	Registration --> Register for Classes	Registration --> Register for Classes	Course Add/Change/Drop link --> instructor and advisor1 approvals; W on transcript	Course Add/Change/Drop link --> instructor, advisor1, and Dean's approvals; WP or WF on transcript	Not permitted
Change to/from Audit	Registration --> Register for Classes	Registration --> Register for Classes	Not permitted	Not permitted	Not permitted
Change to/from CR/NCR grading, or change credits (for variable credit courses)	Registration --> Register for Classes	Registration --> Register for Classes	Course Add/Change/Drop link --> instructor and advisor1 approvals	Course Add/Change/Drop link --> instructor and advisor1 approvals	Only registration errors can be corrected; see Registrar's Office
1	Not required for Graduate & Post-Baccalaureate students				

Summer Semester: 5-week Sessions

Add/Drop Dates Summer Semester 5week 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

Add/Drop Dates Summer Semester 10week Sessions					
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, offered during any term, will 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 time frame, 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 time frame, with consent of the course instructor, students may add courses or change sections with 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 time frame, students must use the Course Add/Change/Drop link to collect permissions from both the course instructor and student's advisor to:

1. drop or add a course
2. perform changes to section, grading option, or variable credit loads

The ability to change to or from audit is no longer available at this time.

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).

Approved course drop requests must be received by the Registrar's Office no later than close of business on the forty-fifth instructional day of a semester. A grade of W (withdrawn) is recorded for each dropped course.

Adding, Dropping, or Other Course Changes Forty-sixth (46) Instructional Day of the Semester Through the Last Regular Class Day

Adds & Changes:

During this time frame, students must use the Course Add/Change/Drop link to collect permissions from both the course instructor and 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.

Approved course add and course change requests must be received by the Registrar's Office no later than close of business on the Last Day of Regular Classes. A $10.00 processing fee is charged for each course add. Added courses and credits may result in additional fees.

Drops:

During this time frame, students may drop courses only by petition. Students must use the Course Add/Change/Drop link to collect permissions from the course instructor, student's advisor, and Dean of the student's major.

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.

Approved course drop requests must be received by the Registrar's Office no later than close of business on the Last Regular Class Day. 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 website add and drop deadlines for law courses.

Cancellation of Courses

The University reserves the right to cancel any course.

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.

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 a withdrawal coordinator. Drop/add forms cannot be used to withdraw from school. Students are not allowed to drop all their courses on CyberBear. International students must first contact a coordinator in the Global Engagement Office before withdrawing as visa status will be affected.

See the withdrawal website for more information.

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, University Villages, or Lewis & Clark Villages must notify the proper officials in the UM 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 withdrawal for medical reasons. Withdrawal after the fifteenth day will not result in a refund but coverage will continue through the remainder of the semester.

Completed Semester Withdrawal Forms must be submitted to the withdrawal coordinator by the Last Regular Class Day. The form is then processed by the Registrar's Office where grades of W (withdrawal) are assigned. After the Last Regular Class Day, students may not withdraw from the University except for very unusual circumstances, as described below.

Retroactive Semester Withdrawals

In exceptional cases, a student may appeal for a retroactive semester withdrawal for a previous semester in attendance. All such appeals are reviewed by a committee. Approval of a retroactive semester withdrawal does not change a student's academic standing. Forms and instructions are located on the Registrar's web page.

Hardship Withdrawals

In the case of extreme medical, family, or other emergencies that are documented and have impacted a student's ability to attend and succeed in courses, a student may appeal for a hardship withdrawal from the university. Such appeals are reviewed by a committee and are considered on a case by case basis. To apply for a hardship petition contact Student Accounts at 406-243-2223.

Prerequisites and Co-requisites

"Prerequisite" 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 prerequisite. Failure to complete satisfactorily the prerequisite will result in the student being dropped from the course which requires the prerequisite. If credit for a prerequisite 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.

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.

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.

Equivalent Courses

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.

Full-Time Student Defined

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.

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.)

PSYX 638 & PSYX 588

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

One credit of PSYX 588 per semester is equivalent to full-time enrollment for students in the School Psychology PhD Program.

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 academic advisor.

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.

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 tuition may be granted to qualifying 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.

Grading and Academic Standing Information

Grading System

The University uses two types of grading: traditional letter grades and credit/ no credit grades. At the option of the instructor, 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 Course Search under Class Details.

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-.

Grades preceded by an R indicate remedial courses. Remedial courses do not count in credits earned, nor in grade point averages, nor do they count toward graduation.

Grades preceded by an E indicate academic forgiveness was granted.

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/failing;
- 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.

Course Audit

A grade of AUD is recorded for all students who register in courses as auditors, intending to listen to the courses without earning credit or being graded. Audited courses do not impact a student's grade point average. 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.

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 upon registration 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/Drop request. Please 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.

No Credit Grading in Composition (NC)

Students enrolled in WRIT 095 and WRIT 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.

COVID - 19 Provisional Grading for the Spring 2020 Semester

In light of the challenging remote instructional environment caused by the COVID-19 pandemic, and in order to moderate student stress while adapting to a new system of course delivery, the University of Montana implemented an alternative grading mechanism effective during the spring semester of 2020. Specific grading information for this provision can be found on the COVID - 19 grading page.

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. If an Incomplete is granted, the student should not re-register for the course as that is considered a course repeat.

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:
    - The student has been in attendance and doing passing work up to three weeks before the end of the semester, and
    - 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 communicates them to the departmental office.
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.

Faculty Options for Grading Mode

- 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 Course Search under Class Details.

Credit Definition

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.

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 point average.

Repeating a Course

The repeat fee is covered when a student pays the $25.00 student support fee.

Initial grades will be marked as repeated and remain on the transcript, but they will not be used 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. Law School students - see the School of Law website for course repeat information.

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, credits earned will be entered into the “Transfer Credit” portion of the student's transcript and will not count toward the credit load for the current semester. There are no fees for this type of credit by examination and grading may be credit/no credit or traditional letter grade.

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 point average.

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.

4.0 President's List

To qualify for the 4.0 President's List, students must be undergraduates, must earn a semester grade average of 4.0, and receive a grade of A in at least 9 credits. No grades of NC or NCR are allowed.

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 academically 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 from Academic Suspension

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 Undergraduate Admissions Office. The readmission form re-activates the student's record and, along with the reinstatement form, allows the student to register for courses.

Appeal of Academic Suspension

Students may appeal a suspension in cases where there are compelling and documented circumstances. If the appeal is approved by the dean of the student's college, the student may return to the university without sitting out a semester. Appeals are considered where the student has otherwise demonstrated an ability to succeed at the university and the compelling circumstances that led to the poor performance have been resolved.

An appeal of academic suspension will only be granted one time, on the approval of the appropriate dean. See the Appeal of Suspension Form, which details eligibility criteria and appropriate procedures.

Academic Forgiveness

- A University of Montana-Missoula or Missoula College 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 above to select a prior semester or semesters they wish to have excluded from calculation in the cumulative GPA. The semester(s) chosen must have occurred prior to the student's 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 or Missoula College 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 on the Registrar's website at: Academic Forgiveness web page.

Transcript of Academic Record

An official transcript of a student's academic record may be obtained via secure online ordering through the National Student Clearinghouse or from the Registrar's Office in the Lommasson Center 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. Copies ordered via National Student Clearinghouse can be delivered electronically, hard copy or direct electronic data exchange

Transcripts are usually available within two to five working days after receipt of the signed request. There is a charge 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.

Additional information regarding ordering options and fees may be viewed via the Registrar's Website.

Any student who enrolled after summer semester 1991 may view their academic record in CyberBear.

Student Rights and Responsibilities

Privacy and Release of Student Education Records (FERPA)

What is FERPA?

FERPA (Family Educational Rights and Privacy Act) was enacted in 1974. It is a set of regulations that applies to those institutions, such as the University of Montana, that receive funding from the Department of Education.

FERPA was written specifically for students and guarantees them the right to inspect and review their education records, the right to seek to amend education records, and the right to have some control over the disclosure of information from those education records.

Resources for Students

Notification Regarding Release of Student Directory Information

The Family Educational Rights and Privacy Act (FERPA) of 1974 (20 U.S.C. 1232g; 34 CFR Part 99) is a federal law that protects the privacy of student education records. "Education records" are "those records, files documents, and other materials which

1. contain information directly related to a student; and
2. are maintained by an educational institution. (20 U.S.C. 1232g(a)(4)(A); 34 CFR 99.3).

FERPA applies to all schools that receive funds under an applicable program of the U.S. Department of Education.

Generally speaking, FERPA allows the University to disclose education records or personally identifiable information from education records in the following circumstances:

- with the written consent of the student,
- if the disclosure meets one of the statutory exemptions, or
- if the disclosure is directory information and the student has not placed a hold on release of directory information.

The University defines the following information as public (directory) information:

- Student's name
- Email address
- Telephone number
- Dates of attendance
- Degrees and awards received
- Major and minor field(s) of studies
- Class
- Participation in officially recognized activities and sports

- Most recent previous educational agency or institution attended by the student
- Weight and height, if student is a member of an intercollegiate athletic team

FERPA allows the University to release a student's directory information to anyone unless the student informs the University Office of the Registrar that he or she does not wish directory information to be released.

NO to Release of Directory Information

If you do not wish to authorize the release of directory information and do not want your directory information to appear in the University Student Directory, you must inform the Office of the Registrar of this by completing a UM Confidentiality Request Form which can be obtained from the Registrar s Office Website. You should allow at least three business days for processing.

You should be aware ...

You should be aware that restricting the release of your directory information has other consequences. For instance, a FERPA restriction makes it difficult or impossible for potential employers to verify your enrollment, or to verify the fact that you have earned a degree from the University. The University cannot notify your home town paper about awards and honors you receive (e.g., Dean's list). For this reason alone, many students choose to remove their FERPA restriction.

Change from NO to YES

At any time after restricting the release of your directory information, you may change your mind and choose to authorize the University to release directory information and for it to appear in the University Student Directory. You can grant such authorization at any time by going to the Registrar's Office at 201 Lommasson with a valid photo identification.

Notification of Students' Rights Under FERPA

FERPA also affords students certain rights with respect to their education records. These rights include:

1. The right to inspect and review the student's education records within 45 days of the day the University receives a request for access.
   To inspect and review his or her education records, a student should submit to the university official(s) or office(s) having custody of the particular record(s), a written request that identifies the record(s) the student wishes to inspect.
2. The right to request the amendment of the student's education records that the student believes are inaccurate, misleading, or otherwise in violation of the student's privacy rights under FERPA. (*This process cannot be used to challenge a grade*.)
   A student who wishes to ask the University to amend a record should write the appropriate University dean or director responsible for custody of the record, clearly identify the part of the record the student wants changed, and specify why it should be changed.
   If the University decides not to amend the record as requested, the University will notify the student in writing of the decision and the student's right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.
3. The right to provide written consent before the University discloses personally identifiable information from the student's education records, except that the University will disclose the following information without a student s consent:
4. Disclosure to school officials with legitimate educational interests. A **school official** is a person employed by the University in an administrative, supervisory, academic, research, or support staff position (including, but not limited to University Police Department personnel, and Curry Health staff); a contractor, consultant, or other outside service provider retained to provide various institutional services and functions under contract or by statute instead of using University employees or officials (including, but not limited to an attorney, auditor, collection agent, information systems specialist, teaching affiliate, and clinical mentor); a person serving on the Board of Regents, staff in the Office of the Commission of Higher Education, the Institutional Review Board, and any other University board, committee or council; or a student serving on an official committee, such as a disciplinary or grievance committee, or assisting another school official in performing his or her tasks.

A school official has a **legitimate educational interest** if the official needs to review an education record in order to fulfill his or her professional responsibilities for the University.

1. Compliance with a lawfully issued subpoena or judicial order.
2. Requests in connection with a student s application for financial aid.
3. Information submitted to accrediting organizations.
4. To other agencies or institutions that have requested the records and in which the student seeks or intends to enroll or is already enrolled so long as the disclosure is for purposes related to the student s enrollment or transfer.
5. Requests by federal and state authorities and authorized third parties designated by federal and state authorities to evaluate a federal or state supported education program; to researchers performing certain types of studies; in connection with statewide longitudinal data systems studies and tracking.

6. In the case of emergencies, the University may release information 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 the extent otherwise permitted by law, the results of a disciplinary proceeding or investigation conducted by the University to an alleged victim of a crime.
8. The right to file a complaint with the U.S. Department of Education concerning alleged failures by the University to comply with the requirements of FERPA. The name and address of the Office that administers FERPA is:

Family Policy Compliance Office
U.S. Department of Education
400 Maryland Avenue, SW
Washington, DC 20202-5901

Additional Resources

For more information on FERPA, please see the following links:

1. Family Policy Compliance Office
2. FERPA 20 USC 1232(g)
3. 34 CFR Part 99
4. Montana Code Annotated

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 the Vice President for Student Affairs website. 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.

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.

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 Provost for Student Success is responsible for procedural administration of the Student Conduct Code for all general conduct. The Vice Provost for Academic Affairs is responsible for all academic conduct. Copies of the Student Conduct Code can be obtained from the Office for Community Standards, located in Turner Hall . The Student Conduct Code also can be accessed on the http://www.umt.edu/student-conduct-code.

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 precedes 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.

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 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 are encouraged to notify advisors or the appropriate administrators regarding students with excessive unexcused absences. Instructors may excuse brief and occasional absences for reasons of illness, injury, family emergency, religious observance, cultural or ceremonial events, 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.

Cultural or ceremonial leave allows excused absences for cultural, religious, and ceremonial purposes to meet the student s customs and traditions or to participate in related activities. To receive an authorized absence for a cultural, religious or ceremonial event the student or their advisor (proxy) must submit a formal written request to the instructor. This must include a brief description (with inclusive dates) of the cultural event or ceremony and the importance of the student s attendance or participation. Authorization for the absence is subject to approval by the instructor. Appeals may be made to the Chair, Dean or Provost. The excused absence or leave may not exceed five academic calendar days (not including weekends or holidays). Students remain responsible for completion or make-up of assignments as defined in the syllabus, at the discretion of the instructor.

Instructors may establish absence policies to conform to the educational goals and requirements of their courses with due consideration of the class s diversity. Such policies should be set out in the course syllabus and should include 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 excessive or unexcused 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.

Major and Minor Requirement Information

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 Registrar's Office.

Students who wish to transfer between Missoula College and UM - Missoula programs must instead submit an Intra Campus File Transfer form. Students transferring from Missoula College to UM - Missoula must be evaluated by Undergraduate Admissions to ensure minimum admission requirements are met.

Forms and information are available on the Registrar's Office forms page.

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 Missoula College section of this catalog.

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, Journalism, Law and majors in the College of Business, College of the Arts and Media, 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.

Major Concentration

Groups of courses have been identified which lead to a specialization within one major or between two or more majors. These specializations are called concentrations. The names of approved concentrations 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 concentration must satisfy the requirements of the major offering it. If one concentration 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 concentration.

If one major has two or more concentrations, a student may satisfy the requirements for more than one concentration 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 Phyllis J Washington College of Education section of this catalog.

Bachelor Degree Admission Entering Freshmen < University of Montana

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 admissons 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 have a high school diploma or its recognized equivalent, but do not otherwise meet the admission requirements, may be admitted on a conditional basis. To be admitted conditionally, the Admissions Committee must determine 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

Admission Grid

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. 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. Final high school transcripts. Transcripts should be submitted after graduation and must include a graduation date and final GPA. Eligibility for admission and scholarships will be verified from this transcript.
5. Immunization Form. All students are required to submit a completed Medical Requirement Form to the Curry Health Center 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.

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 HiSET or GED. Students interested in becoming University of Montana (Mountain Campus) students must meet the admission requirements of the University of Montana.

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. 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/HiSET/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 Medical Requirement 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.

Bachelor of Applied Science Admission < University of Montana

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 (if the applicant is new to The University of Montana system).
4. Immunization Form. All students are required to submit a completed Medical Requirement Form to the Curry Health Center two weeks prior to registration if the applicant is new or has been absent for more then 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.

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 completely online courses only. When applying for this status, students are not required to provide proof of immunization or complete a Medical Requirement 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.

Former University of Montana-Missoula Students - Readmission

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 Registrar's Readmission website for additional information.

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.

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 on the Curry Health Center website.

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 the Registrar's Readmission website for additional information.

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 for each Higher Level exam passed provided the University has received satisfactory scores from the International Baccalaureate Program, with an examination score of four or higher. University policy on awarding IB credit is available on the Admissions Advanced-Credit web page.

The University grants credit for Standard Level exams for some IB languages or if they are taken as a component of the full Diploma. UM will offer a maximum of 30 credits (sophomore equivalent standing) to all incoming students who have received a Diploma with a score of 30 or better, with no individual exam scores lower than four. These credits will normally be distributed as electives, although students who desire credit for specific UM courses, may petition the Admissions Office. All incoming students who have completed the IB Diploma will be given priority consideration for admission to the UM Davidson Honors College.

General Education and course equivalency credit is granted for the exams listed below as indicated. These credits cannot be used toward upper-division coursework. Enrollment Services-Admissions will provide students with an evaluation of their credits upon receipt of official scores. If you do not see a specific IB exam on our list and would like it evaluated for credit, please email Admissions with the following information: exam title and level.

AP Capstone Diploma

The University of Montana recognizes and awards credits for the AP Capstone Diploma. For more about the AP Diploma, visit the College Board AP Capstone website.

All incoming students who have completed the AP Capstone Diploma will be given priority consideration for admission to UM s Davidson Honors College. Students completing the AP Capstone Diploma Research course will earn the equivalent of 3 credits of HONR 190 Honors Research. Students completing the AP Capstone Seminar will earn the equivalent of 3 credits of HONR 194 Honors Seminar.

General Education and course equivalency credit is granted for the posted exams as indicated. These credits cannot be used toward upper-division coursework. Enrollment Services-Admissions will provide students with an evaluation of their credits upon receipt of official scores.

If you do not see a specific AP course on our list and would like it evaluated for credit, please contact Admissions with the course title and level. To request that your score reports be sent to the University of Montana visit the AP website (recommended) or call AP directly at (212) 713-8000. The University of Montana awards college credit to undergraduate degree students on the basis of official score reports from the Advanced Placement Program/College Board.

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 Medical Requirement Form and return the form to the Curry Health Center prior to orientation and registration.

Registration cannot be completed without this documentation. A Medical Requirement 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, go to the Dual Credit Program website or contact Jordan Patterson, Missoula College, at (406) 552-8689.

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

1. violence and destructive tendencies,
2. behavior on other college campuses, and
3. 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.

Per Board Of Regents policy #301.5, students have the right to appeal their official evaluation by contacting the Admissions Office. If a student exercises the appeal rights set out in this policy, the review and a final decision must be completed by the class pre-registration date for the following academic term. The student must initiate the appeal process, in a timely manner, in order to give the institution time to complete its review before the deadline described in the preceding sentence.

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 is 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

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 UM Graduate School website. 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 on the UM Graduate school website. 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.

HiSET or GED (General Education Development) < University of Montana

HiSET or 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 HiSET or GED test. HiSET or GED students who have been out of high school for less than three years or are under the age of 21 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.

International Student Admission < University of Montana

International Student Admission

The University of Montana-Missoula International Programs-International 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, International Programs-International 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 International Programs-International 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. 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. The transcripts must be in the original language accompanied by an English translation. The applicant may make the translation themselves. Photocopied, scanned, or emailed copies will not be accepted.
    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 International Programs-International Admissions.
5. English Language Proficiency.
   Montana University System campuses require international-student applicants to present evidence of proficient English use. Campuses may impose additional requirements on applicants from other countries in order to assure student success.

The University of Montana considers applicants to be international students if they are neither U.S. citizens, immigrants (permanent residents) nor refugees. These applicants may include holders of F (student) visas, J (exchange visitor) visas, and M (vocational training) visas.

All international students must be academically prepared and demonstrate sufficient proficiency in English to qualify for admission. In order to demonstrate sufficient proficiency, students must meet one of the following admissions standards at the undergraduate level:

PROFICIENCY EXAMINATION	FULL ADMISSION	CONDITIONAL ADMISSION
TOEFL iBT	70 and above	69 and below
TOEFL PBT	525 and above	524 and below
TOEFL CBT	193 and above	192 and below
IELTS	6.0 (no band below 5.5)	5.5 (no band below 5.0)
MELAB	74 and above	73 and below
SAT - Writing Score	440 and above	
ACT - English Writing	18 and above	
STEP EIKEN	Grade Pre-1	
UM English Language Institute	525 TOEFL ITP or recommendation from ELI	
ELS Language Center	Successful completion of Program Level 112	
Kaplan Aspect	Successful completion of Higher Intermediate Level 112	
Vancouver English Centre	Successful completion of Level 11	
All inquiries about evidence of English proficiency and English language proficiency test scores should be directed to Enrollment Services-Admissions.		

Proficiency Examination

Exemptions

Exemptions to the English proficiency policy may be considered for any one of the following:

- applicants whose native language is English;
- applicants with two or more years of attendance at an institution of higher education where English is the primary language of instruction; or
- applicants who transfer an equivalent for WRIT 101.

Students who are citizens of the following countries need not submit proof of English language proficiency unless English is not the student's native language. These countries include: Australia, Canada, Ireland, New Zealand, the United Kingdom, and South Africa.

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 International Programs-International Admissions. When the student arranges to take one of the proficiency tests, he or she should request that examination results be sent directly to

International Programs-International Admissions
The University of Montana-Missoula
Missoula, Montana 59812.
(Code N. 4489 00)

Full Admission

The University of Montana will consider for full admission only those undergraduate students providing evidence of English language proficiency in the form of one of the scores listed above:

PROFICIENCY EXAM	SUPERIOR PROFICIENCY	*ADVANCED PROFICIENCY*	*INTERMEDIATE PROFICIENCY*
iBT TOEFL	92 or higher	81 to 91	70 to 80
PBT TOEFL	575 or higher	550 to 574	525 to 549
CBT TOEFL	234 or higher	213 to 233	192 to 212
IELTS	6.5 (no band <6.0)	6.5 (no band <5.5)	6.0 (no band < 5.0)
MELAB	83 or higher	78 to 82	74 to 77

Admissions

*	Full Admission with Academic Support: International-student applicants qualify for admission with academic support if they have 1. completed one of the English proficiency examinations (either TOEFL, IELTS, or MELAB) and 2. earned scores within the ranges presented below:

Any student scoring in the advanced or intermediate proficiency ranges are strongly recommended to enroll in academic support service courses.

- During their first semester of attendance, advanced-proficiency students may take 3 but no more than 6 credits coursework in English as an Academic Second Language (EASL).
- During their first two semesters in attendance, intermediate-proficiency students may take 6 but no more than 12 credits of coursework in EASL.

Academic Support coursework entails EASL courses, credited toward a degree. The University offers EASL 250 and EASL 251 (intermediate) as well as EASL 450 and EASL 451 (advanced) in order to assist international students in becoming ready for and effective in mainstream college coursework.

Conditional Admission

Students who do not meet the required English language proficiency for full admission but are otherwise academically qualified may seek eligibility for conditional admission. Students submit International applications and all required supporting documents to the Admissions Office, and upon a review of their academic eligibility, students may then be admitted conditionally. Enrollment Services issues the conditional-acceptance letter and an I-20 form and then forwards this information to the English Language Institute.

Summary: An iBT score of 70 is required for full admission; an iBT score between 70-93 places an academic-support recommendation on full admission. These international students are encouraged to complete one or more Academic Support courses which count for degree credit.

Justification: A score below 70 iBT indicates a pre-emergent proficiency for academic purposes, failing a full-admission standard; a score between 70-93 iBT indicates emerging proficiency for academic purposes, thus meeting a full-admission standard with a recommendation for academic support with a projected increase of 12 iBT points per semester; emerging proficiency is intermediate (70-81) and advanced (82-93). These students enroll in a program of study delivering academic support that respects timely passage toward a program of study leading to degree. This range reflects most universities' admissions standards and sets a ceiling with those of prestigious ones.

*It is **recommended**,*

1. *this policy be revisited for review and revision to respond to developments,*
2. *an admission deadline for international-student applications is May prior to the Academic Year , and*
3. *ASCRC coordinate its recommendations for this undergraduate international-student standard with Graduate Council, setting the graduate international-student standard.*

When to Apply

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

- Autumn Semester Deadline May 15
- Spring Semester Deadline October 15

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

Transfer Student Admission < University of Montana

Transfer Student Admission

Academic Eligibility

Undergraduate degree applicants who have graduated from high school or have earned a HiSET or 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. 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 Medical Requirement 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.

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.

UM accepts Associate of Arts (AA) and Associate of Science (AS) Degrees from US colleges and universities accredited by regional accrediting agencies recognized by the US Department of Education. AA and AS Degrees from other institutions will be reviewed on an individual basis. A completed AA or AS degree satisfies UM s lower-division General Education requirements; students must still complete the advanced writing course and are encouraged to explore lower-division language courses to enhance their major. *Since Associate of Applied Science (AAS) Degrees focus on technical skills, the degree does not necessarily satisfy all lower-division General Education requirements at UM.*

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 advanced writing requirements in their majors.

Montana University System transfer students who have completed the lower-division course work in an approved general education program prior to admission should request that the Registrar of the other school certify completion of these requirements to the Admissions Office.

Students who have earned 20 or more credits equivalent to the approved Montana University System Transfer Core (see MUS Transfer core website) as a degree-seeking student at another institution prior to their initial registration at UM-Missoula may choose to complete the MUS Transferable General Education Curriculum to satisfy all UM lower division General Education requirements. Students will still have to complete UM's advanced writing requirement.

In order to determine if transfer course work satisfies UM General Education requirements, the credits for each course are rounded. For example, courses from schools on other calendars (such as quarters or trimesters) that are articulated on UM transcripts at 2.5 credits or higher will be rounded to 3 credits for the purpose of fulfilling, or partially fulfilling, General Education requirement groups I-XI. This rounding rule does not apply when calculating students total completed credits for graduation requirements, nor towards the 39 upper-division credit requirement.

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.

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.

This information pertains only to the intermediate writing course, not the departmental advanced writing requirement. Students should speak to their major department regarding any issues relating to the advanced writing requirement.

If a student believes a course taken at another institution meets the intermediate writing course requirement, the student may petition for course exemption through the Writing Committee. The student must provide the materials listed below. Materials should be submitted to Camie Foos in the Faculty Senate Office, UH 221, camie.foos@mso.umt.edu, 406-243-5553.

Students within two semesters of graduation must use the Graduation Appeal process in place of the Intermediate Writing Course Exemption Appeal process.

Students applying for course exemption through the Intermediate Writing Course Exemption Appeal process must submit the following materials. Incomplete applications will not be considered.

1. A cover letter outlining the basis for the request. The cover letter should clearly articulate how the proposed course meets the learning outcomes of Intermediate Writing Courses at the University of Montana (listed below). Include pertinent information such as contact information, student ID number, and how you fulfilled this requirement in a course at your previous institution.
2. Evidence of a C- or better in the course.
3. A syllabus and course description, and any available writing assignment instructions. The syllabus or assignment instructions must show that the course required at least 16 pages of writing and that 50% of the course grade was based on writing performance.

Evaluation

- Student earned a C- or better in the transferred course, and at least 50% of the course grade was based on writing performance
- The transferred course goals are similar to Intermediate Writing Course Learning Outcomes:
  - 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 o Find, evaluate, and use information effectively and ethically
  - Begin to use discipline-specific writing conventions
  - Demonstrate appropriate English language usage
  - Produce at least 16 pages of writing

Review Procedure

Petitions are reviewed by the Writing Committee. Students within two semesters of graduation must use the Graduation Appeal process in place of the Intermediate Writing Course Exemption Appeal process. Notice of the decision is sent to the student s University of Montana email address.

Undergraduate Nondegree Status < University of Montana

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 HiSET or 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 complete and signed.
2. Application fee. The fee is $30.00. 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 Medical Requirement 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.

Advising

Introduction

Academic advising is critical to student success at University of Montana (UM). 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.

The UM catalog is the official source of information on the UM General Education Requirements, requirements of individual academic programs, and graduation-related policies. The Advising Manual is a comprehensive policy and procedural guide for faculty and staff advisors at UM.

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 professionally trained 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 open and productive dialogue about the student's academic, personal, and career goals.

Advising Best Practices

No two advising sessions are ever the same. There are guidelines and best practices, however, that apply to most interactions between an advisor and advisee. These include:

- First, do no harm. Ask questions, double check information, and always document your interactions.
- Always reference a student s current academic record during an advising session. If you do not have access to printable student transcripts, access student records in Banner, Cyberbear, or Degree Works.
- Always maintain confidentiality. The student s academic record and all discussions (face-to-face, by phone or via email) between you and an advisee cannot be discussed with a third party unless you have the advisee s authorization. See the FERPA website maintained by the Registrar s Office link included in the Resources section of this document for detailed information on student confidentiality.
- Go beyond approving a class schedule and discuss the student s major choice, career or professional objectives, co-curricular opportunities and university resources. Help students make the most of their undergraduate experience at UM by connecting them with relevant resources and opportunities rather than simply making referrals.
- Advisors help students find the information they need to make good decisions and effectively advocate for themselves; advisors do not make decisions for the advisee.
- Use the available tools and resources to maximize the effectiveness of individual advising sessions with students. There are numerous technological and other tools available to advisors. Familiarize yourself with available tools by attending relevant training's.

Minimum Expectations for the Advising Appointment

Advising numbers are distributed to academic departments 3-4 weeks prior to the Priority Registration period. Advising procedures and distribution of advising numbers vary widely among academic departments. At a minimum, the advising session should cover the following:

- Ask the student how they are doing and how their semester is going. Are they enjoying and performing well in their current courses? Are there additional support services they might benefit from? Based on student s responses and subsequent needs, provide student with available campus resources, encourage the student to utilize them, and, when possible, follow-up with the student to ensure that they have taken advantage of relevant resources. *Distributing the advising number shouldn t be the goal of advising*. Sometimes students are looking for the opportunity to discuss an issue but don t know how to start the conversation.
- Is the student s major a good fit and might a minor or second major be appropriate?
- Using Degree Works, conduct a comprehensive degree evaluation to inform student of progress towards degree completion (major requirements, GERs, Upper Division credits and general electives to meet the 120 credit requirement). Educate students on how they can access Degree Works to self-serve.
- Check to see if a student has registration-preventing and/or other holds, release advising pin, and notify student of when they can register for upcoming semester classes based on the priority registration timetable.
- Discuss the student s plans following graduation and encourage the student to take advantage of co-curricular or academic enrichment opportunities such as internships, service learning, undergraduate research, education abroad, etc. Also encourage the student to investigate federal student aid, scholarships and other higher education funding opportunities.

- At the end of the advising session with each student, summarize the main issues that surfaced in your advising interaction with the student, and ask them what their next steps are with respect to completing tasks and addressing issues pertaining to their academic progress.

Expectations of Students: How to Prepare for the Advising Appointment

Although academic advising is a relationship of shared responsibility between the advisor and the student, it is important for students to realize that the ultimate responsibility for meeting all graduation requirements is their own. Students improve their academic planning and success by learning about the academic requirements of their academic program(s), UM policies on registration and graduation, and by fully using available advising services. In order to prepare for a productive advising appointment, students should:

- Develop a plan of courses for upcoming semester registration and be prepared to discuss your long-term academic, personal, and professional goals.
- Login to the Cyberbear Student Profile to check for registration-preventing holds. If holds are present, try to clear them before the advising appointment.
- Research academic enrichment and other beyond-the-classroom opportunities of interest to discuss during the advising appointment.
- Be honest with your advisor about issues impacting your ability to be successful. Advisors can only help with issues or situations they are aware of. This requires open and effective communication with your advisor.

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-Medical Sciences, Pre-Nursing, Pre-Physical Therapy, freshman Media Arts, or an undergraduate Non-degree student, he/she is assigned to a professional advisor at the Undergraduate Advising Center (www.umt.edu/uac).

To change a major, a student must submit an official Change of Major form to the Registrar's Office located in the Lommasson building room 201. 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).

Academic Support Services

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 and Public Speaking Center supports students in becoming more effective writers and provides tutoring at several locations across campus; 406-243-2266). The Math Learning Center provides tutoring in all developmental and 100-level math courses. Missoula College students may receive tutoring in math, writing and a variety of other subjects through the Academic Support Center. The Curry Health Center Counseling Center offers workshops on a variety of topics designed to enhance student academic performance.

TRIO Student Support Services

TRIO SSS is a federally funded program offering support services to students who are first-generation, (neither parent completed a four-year degree) low-income or receiving a Pell grant, or a student with disabilities. TRIO's mission is to provide all-around support such as advising, study skills class, career and college success class, peer mentoring, tutoring, book loan program, and more! To qualify, a student may complete an on-line

application or contact our office to pick one up. (neither parent has completed a four-year degree, financial need based on income (Pell grant eligible), or a student with a disability.

For more information, visit TRIO at Lommasson Center 154, call 406-243-5032, or the TRIO website.

Academic Support Center (ASC)

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.

Degree/Certificate Requirements for Graduation

Catalog Governing Graduation

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 Graduation desk in the Registrar's Office at the beginning of the semester preceding the semester in which he or she expects to graduate. Deadline dates are specified in the Class Schedule.

Credits Required for a Certificate of Completion

See individual College or School catalog sections for certificate course and credit requirements. Course and credit requirements vary by program.

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, of which 51% must be from UM. 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 program requirements.
2. Courses numbered below 100 do not count toward the 60 credit requirement, but do fulfill financial aid credit load requirements.
3. Complete the specialized program degree requirements including 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.
    2. **Computation:** the ability to complete basic algebraic manipulations and achieve mathematical literacy.
    3. **Human Relations:** the ability to analyze social problems and structure, ethical norms of professions and society, human behavior, or human values systems.
    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.
    5. **Professional Competency:** 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, clinical 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 minimum total of 120 credits is required for graduation with a bachelor degree in most academic programs offered by the University of Montana. A greater number is required in some specific programs; students should consult the appropriate catalog section for their program of interest and discuss their plans with an academic advisor.

Students may elect to earn more than one degree or major at the bachelor level. Available options include a double major or dual degree :

- A double major is awarded as one degree with one diploma that may list two or more majors. The graduating student with multiple majors must fulfill the curricular requirements for two or more majors as well as all other requirements for graduation. Two majors will normally be within a single classification of bachelor s degree (e.g. Bachelor of Sciences). Alternatively, the student may fulfill requirements for two majors across degree classes. In this case the student must declare a primary major that determines the type of degree awarded (BS, BA, etc.) that will be printed on the student s diploma and transcript. The secondary major shall be annotated on the student transcript as completed.
- A dual degree is awarded as two degrees with two diplomas (e.g. Bachelor Sciences and a Bachelor of Arts). The student must fulfill all of the program requirements for each of the separate bachelor degrees and must comply with the Residency Requirements for Degrees/Certificates (below) for each degree. The two, dual (or multiple) degrees may be earned concurrently or at different times but all dual degree graduates must complete a minimum of 150 credits by completing an additional 30 credits for each subsequent bachelor degree. However, note that academic residency requirements apply differently for University of Montana graduates versus non-graduates seeking dual or subsequent degrees, so the requirements may differ.

General education requirements need only be met once for either a double major or dual degree.

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.

Lower-division transfer courses accepted as substitutes for upper-division courses required for a particular major will not count toward the university s 39 upper-division 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 Certificates and Associate of Applied Science Degrees

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.

1. A minimum of 30 credits of the required number must be earned from the University of Montana-Missoula.
2. A minimum of 30 credits of the required number must be earned in study on the University of Montana-Missoula campus.
3. 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; they have met first degree residency requirements and need only do so once. Students seeking a second bachelor degree or dual degree from the University of Montana must complete all academic requirements for each degree (first and subsequent) and earn a minimum of 150 credits by completing an additional 30 credits for each subsequent bachelor degree. For students who have met first degree residency requirements, a minimum of 20 credits of the required additional 30 credits must be earned in study on the University of Montana-Missoula campus.

Students attending the University of Montana who are not University of Montana graduates, but already have a bachelor degree from another institution must meet University of Montana residency Requirements for The First Bachelor Degree (above) for the subsequent degree that they are now seeking. This will require at least 30 additional credits of course work to be earned from the University of Montana-Missoula campus with 30 of the last 45 credits earned from 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.

Transcription of double majors and dual degrees

All majors, minors, degrees and certificates earned from the University of Montana shall be clearly and specifically listed on official transcripts under a single degree or as separate dual/multiple degrees, as appropriate.

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:

Credits maximums		
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, ACT 101-ACT 287, ACTV, MSL 106 and MSL 203)	4	4
Military Science Leadership Courses (contracted students may present 24 credits)	12	12
Music performance (MUSI 102A, MUSI 123A, MUSI 135A, MUSI 136A, MUSI 235, MUSI 236, MUSI 218)	6	6
Ensemble music (MUSI 112A, MUSI 114A, MUSI 110A, MUSI 131A and MUSI 122A)	8	8
Credit/No Credit credits	18	18
Internship credits in 198/298/398/498	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

Graduates may be awarded honors with their certificates, associate, and bachelor degrees based on their cumulative University of Montana-Missoula (UM) Grade point average (GPA).

Consistent with Board of Regents policy, the UM GPA shall be computed by dividing the sum of grade points earned by the total credits carried, except that neither the credits nor the grade points shall be counted for a. non-credit, remedial, developmental, or other sub college-level courses; b. courses taken on a credit/no credit basis (pass/fail, etc.); or, c. transferred coursework. To be eligible for graduation with honors, at least 50% of the credits required for the certificate or degree must be credits eligible to count towards the student s UM GPA.

Graduation cum laude (*with honors*), magna cum laude (*high honors*) or summa cum laude (*highest honors*)

Each semester the registrar shall distribute a list of graduation candidates with a UM GPA that meets or exceeds 3.40. Faculty Senate shall award honors as:

1. Cum laude (*Honors*): All undergraduate students shall graduate *cum laude* (*with honors*) when their cumulative UM GPA meets or exceeds 3.40.

2. Magna cum laude (*High Honors*): Departments and programs may stipulate additional requirements and then recommend students for graduation magna cum laude (*high honors*) when the cumulative UM GPA meets or exceeds 3.70.

3. Summa cum laude (*Highest Honors*): Departments and programs may stipulate additional requirements and then recommend students for graduation summa cum laude (*with highest honors*) when their UM GPA meets or exceeds 3.90.

General Education Requirements

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

Overview

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 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.

Many of the general education courses listed below require prerequisites be met before registration. The prerequisites are listed in the individual course descriptions.

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
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	3
2. One designated Writing Course	1-3
3. Upper-Division Writing Requirement (as specified by major department)	
Group II: Mathematics	3
Group III: Modern and Classical Languages - successful completion of a second semester language (test out provisions apply). Some majors have been granted exceptions to the Modern and Classical Language requirement. The majors are listed below.	0-11
Group IV: Expressive Arts	3
Group V: Literary and Artistic Studies	3
Group VI: Historical Studies	3
Group VII: Social Sciences	3
Group VIII: Ethics and Human Values	3
Group IX: Democracy and Citizenship (Y) - Formerly American & European	3
Group X: Cultural & International Diversity (X) - Formerly Indigenous and Global	3
Group XI: Natural Sciences - One Natural Science course must include a laboratory experience.	6
Total	28-491

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

Courses that satisfy more than one Group

TITLE	GENERAL EDUCATION GROUPS
AAST 141H Black: From Africa to Hip-Hop	Historical Studies, Cultural Intl Diversity (X)
ANTY 101H Anthro the Human Experience	Historical Studies, Cultural Intl Diversity (X)
ANTY 102H Intro to South S. East Asia	Historical Studies, Cultural Intl Diversity (X)
ANTY 103H Intro Latin American Studies	Historical Studies, Cultural Intl Diversity (X)
ANTY 122S Race and Minorities	Social Sciences Course (S), Democracy and Citizenship (Y)
ANTY 141H The Silk Road	Historical Studies, Cultural Intl Diversity (X)
ANTY 220S Culture Society	Social Sciences Course (S), Cultural Intl Diversity (X)
ANTY 241H Central Asian Culture and Civ	Historical Studies, Cultural Intl Diversity (X)
ANTY 251H Foundations of Civilization	Historical Studies, Cultural Intl Diversity (X)
ANTY 254H Arch Wonders of the World	Historical Studies, Writing Course-Intermediate, Cultural Intl Diversity (X)

ANTY 326E Indigenous Peoples the Ethics of Development	Ethical Human Values Course, Cultural Intl Diversity (X)
ANTY 351H Archaeology of North America	Historical Studies, Cultural Intl Diversity (X)
ARTH 150H Introduction to Art History	Historical Studies, Cultural Intl Diversity (X)
ARTH 200H Art of World Civilization I	Historical Studies, Cultural Intl Diversity (X)
ARTH 201H Art of World Civilization II	Historical Studies, Democracy and Citizenship (Y)
ARTH 250L Introduction to Art Criticism	Lit Artistic Studies (L), Writing Course-Intermediate
BIOB 210N Communicating Biology	Natural Science Course (N), Writing Course-Intermediate
CHMY 305E Ethics, Literature and Writing in the Sciences	Ethical Human Values Course, Writing Course-Advanced
CLAS 180H Env Nat in Classical World	Historical Studies, Writing Course-Intermediate
CLAS 251L The Epic	Lit Artistic Studies (L), Writing Course-Intermediate
CLAS 252L Greek Drama: Politics on Stage	Lit Artistic Studies (L), Writing Course-Intermediate
CSCI 215E Social Ethical Issues in CS	Ethical Human Values Course, Writing Course-Intermediate
CSCI 315E Computers, Ethics, and Society	Ethical Human Values Course, Writing Course-Advanced
DANC 360L World Dance	Lit Artistic Studies (L), Cultural Intl Diversity (X)
ENST 225S Sustainable Communities	Social Sciences Course (S), Democracy and Citizenship (Y)
ENST 231H Nature and Society	Historical Studies, Writing Course-Intermediate
ENST 335L The Environmental Vision	Lit Artistic Studies (L), Writing Course-Advanced
GH 151L Introduction to Western Humanities Antiquity	Lit Artistic Studies (L), Writing Course-Intermediate
GH 152L Introduction to the Humanities Medieval to Modern	Lit Artistic Studies (L), Writing Course-Intermediate
GH 161H Asian Humanities	Historical Studies, Lit Artistic Studies (L)
GPHY 121S Human Geography	Social Sciences Course (S), Cultural Intl Diversity (X)
GPHY 141S Geography of World Regions	Social Sciences Course (S), Cultural Intl Diversity (X)
GRMN 340L Nature and the Environment in German Literature and Film	Lit Artistic Studies (L), Democracy and Citizenship (Y)
GRMN 351H German Culture: Beginnings to Romanticism	Historical Studies, Writing Course-Advanced, Democracy and Citizenship (Y)
GRMN 352H Germ Culture: Romanticism to the Present	Historical Studies, Writing Course-Advanced, Democracy and Citizenship (Y)
HONR 121L Ways of Knowing	Lit Artistic Studies (L), Writing Course-Intermediate
HONR 122E Ways of Knowing II	Ethical Human Values Course, Democracy and Citizenship (Y)
HSTA 101H American History I	Historical Studies, Democracy and Citizenship (Y)
HSTA 102H American History II	Historical Studies, Democracy and Citizenship (Y)
HSTA 103H Honors American History I	Historical Studies, Democracy and Citizenship (Y)
HSTA 104H Honors American History II	Historical Studies, Democracy and Citizenship (Y)

HSTA 150H The Veteran's Experience	Historical Studies, Democracy and Citizenship (Y)
HSTR 101H Western Civilization I	Historical Studies, Democracy and Citizenship (Y)
HSTR 102H Western Civilization II	Historical Studies, Democracy and Citizenship (Y)
HSTR 103H Honors Western Civilization I	Historical Studies, Democracy and Citizenship (Y)
HSTR 104H Honors Western Civilization II	Historical Studies, Democracy and Citizenship (Y)
HSTR 230H Colonial Latin America	Historical Studies, Cultural Intl Diversity (X)
HSTR 231H Modern Latin America	Historical Studies, Cultural Intl Diversity (X)
HSTR 240H East Asian Civilizations	Historical Studies, Cultural Intl Diversity (X)
HSTR 301X Ancient Greek Social History	Historical Studies, Cultural Intl Diversity (X)
JPNS 150H Japanese Cult Civiliz	Historical Studies, Cultural Intl Diversity (X)
JRNL 100H Media History and Literacy	Historical Studies, Democracy and Citizenship (Y)
LING 375X Linguistic Ecology and Language Endangerment	Writing Course-Intermediate, Cultural Intl Diversity (X)
LIT 110L Intro to Lit	Lit Artistic Studies (L), Writing Course-Intermediate
LIT 120L Poetry	Lit Artistic Studies (L), Writing Course-Intermediate
LIT 202L The Environmental Imagination	Lit Artistic Studies (L), Writing Course-Intermediate
LIT 236L Literary Histories	Lit Artistic Studies (L), Writing Course-Intermediate
LIT 246L Genres, Themes, Approaches	Lit Artistic Studies (L), Writing Course-Intermediate
LIT 353L Milton	Lit Artistic Studies (L), Writing Course-Advanced
MUSI 207H World Music (equiv to 307)	Historical Studies, Cultural Intl Diversity (X)
MUSI 301H Music History I	Historical Studies, Democracy and Citizenship (Y)
MUSI 302H Music History II	Historical Studies, Writing Course-Intermediate, Democracy and Citizenship (Y)
NASX 105H Intro Native Amer Studies	Historical Studies, Cultural Intl Diversity (X)
NASX 235X Oral/Written Trads Native Amer	Lit Artistic Studies (L), Writing Course-Intermediate, Cultural Intl Diversity (X)
NASX 239X Nat North Amer History Art	Lit Artistic Studies (L), Cultural Intl Diversity (X)
NASX 303E Ecological Perspectives in Native American Traditions	Ethical Human Values Course, Cultural Intl Diversity (X)
NASX 304E Native American Beliefs/Philos	Ethical Human Values Course, Cultural Intl Diversity (X)
PHL 101Y Introduction to Philosophy	Lit Artistic Studies (L), Democracy and Citizenship (Y)
PHL 102Y Topical Intro to Philosophy	Lit Artistic Studies (L), Democracy and Citizenship (Y)
PHL 210E Moral Philosophy	Ethical Human Values Course, Writing Course-Intermediate
PHL 241N Hist Philosophy of Science	Historical Studies, Natural Science Course (N)
PHL 317E Law and Morality	Ethical Human Values Course, Democracy and Citizenship (Y)
PSCI 210S Intro to American Government	Social Sciences Course (S), Democracy and Citizenship (Y)

RLST 232H Buddhism	Historical Studies, Cultural Intl Diversity (X)
RLST 234X Hindu Religious Traditions	Historical Studies, Cultural Intl Diversity (X)
RLST 238X Japanese Religions	Historical Studies, Cultural Intl Diversity (X)
RUSS 105H Intro to Russian Culture	Historical Studies, Democracy and Citizenship (Y)
SOCI 220S Race, Gender Class	Social Sciences Course (S), Democracy and Citizenship (Y)
SSEA 202X Introduction to India	Historical Studies, Cultural Intl Diversity (X)
THTR 101L Introduction to Theatre	Lit Artistic Studies (L), Democracy and Citizenship (Y)
THTR 330H Theatre History I	Historical Studies, Writing Course-Intermediate
THTR 331Y Theatre History II	Writing Course-Advanced, Democracy and Citizenship (Y)
WRIT 201 College Writing II	Writing Course-Intermediate, Writing Course-Introductory

Group I: Writing

Requirements

Students must satisfy the following three requirements in order:

1. Introductory College Writing;
2. Intermediate College Writing;
3. Advanced College Writing

Introductory College Writing

Students must complete WRIT 101, WRIT 201, 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 who are placed into WRIT 095, based on their standardized test scores, must successfully complete WRIT 095 prior to enrolling in WRIT 101 or WRIT 201. Such students may challenge their placement with specific scores from the University Writing Assessment. Entering student who place into WRIT 201 may choose to take WRIT 101 instead.

Intermediate and Advanced College Writing

To fulfill the General Education requirements for college writing students must pass one Intermediate College Writing course with a grade of C-minus or better, and also one Advanced College Writing course with a grade of C-minus or better (in this order, if possible). Students may not use the same writing course to meet both the Intermediate College Writing and the Advanced College Writing requirement. The courses satisfying the Advanced College Writing requirement differ according to the student's major. Students should examine the course catalog for the specific courses that fulfill the writing requirements and consult with their advisor. The courses satisfying either the intermediate or the advanced writing requirements are listed in separate course catalog tables below.

Course List		
CODE	**TITLE**	**HOURS**
Correction to the previous Catalog (2017-2018): The above section Intermediate and Advanced College Writing takes effect only in the current 2018-2019 Catalog, but mistakenly appeared already in the 2017-2018 Catalog. In the 2017-2018 Catalog, the section Intermediate and Advanced College Writing should be replaced with the two sections Intermediate College Writing and Advanced College Writing from the 2016-2017 Catalog.		

Intermediate Writing Courses

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

		Course List

CODE	TITLE	HOURS
ANTY 254H	Arch Wonders of the World	3
ANTY 310	Human Variation	3
ARTH 250L	Introduction to Art Criticism	3
ARTH 425	Art of the Renaissance	3
BIOB 210N	Communicating Biology	3
BMGT 205	Professional Business Comm	3
BMGT 212	Critical Analysis for Business	3
C&I 287	Business Communications	3
CLAS 180H	Env & Nat in Classical World	3
CLAS 251L	The Epic	3
CLAS 252L	Greek Drama: Politics on Stage	3
CSCI 108	Interdisciplinary Computing: Practical Computational Problem Solving	3
CSCI 215E	Social & Ethical Issues in CS	3
ENST 201	Environmental Info Resources	3
ENST 231H	Nature and Society	3
FILM 320	Shakespeare and Film	3
GH 151L	Introduction to Western Humanities Antiquity	3
GH 152L	Introduction to the Humanities Medieval to Modern	3
HONR 121L	Ways of Knowing	3
HSTA 347	Voodoo, Muslim, Church: Black Religion	3
HSTA 385	Families & Children in America	3
HSTR 300	Writing For History	3
HSTR 334	Latin America: Reform & Revolution	3
HSTR 401	The Great Historians	3
IRSH 380	Topics in Irish Studies	3
IRSH 381	Irish Women's Writing	3
IRSH 382	Rockin' Rebels: Popular Irish Music from Traditional to Punk	3
JRNL 270	Reporting	3
LING 375X	Linguistic Ecology and Language Endangerment	3
LIT 110L	Intro to Lit	3
LIT 120L	Poetry	3
LIT 202L	The Environmental Imagination	3

LIT 236L	Literary Histories	3
LIT 246L	Genres, Themes, Approaches	3
MART 300	Visions of Film	3
MUSI 302H	Music History II	3
NASX 235X	Oral/Written Trads Native Amer	3
NASX 280	NA Studies Rsrch Theors/Mthds	3
NRSM 200	Nat.Resource Professional Wrtg	3
PHL 210E	Moral Philosophy	3
THTR 330H	Theatre History I	3
WRIT 121	Intro to Technical Writing	3
WRIT 201	College Writing II	3
WRIT 325	Science Writing	3
WRIT 391	Special Topics (Fashion, Beauty & Misogyny - one time only autumn 2019)	3

Advanced Writing Courses

The following courses are designated as Advanced Writing Courses for this catalog year. Students should consult with their advisor regarding the requirement specified by their major.

		Course List
CODE	**TITLE**	**HOURS**
AHAT 342	Therapeutic Interventions	2
ANTY 402	Quan Ethnographic Field Methds	3
ANTY 408	Advanced Anthro Statistics	3
ANTY 430	Social Anthropology	3
ANTY 431	Ethnographic Field Methods	3
ANTY 450	Archaeological Theory	3
ANTY 455	Artifact Analysis	3
ARTH 350	Contemp Art and Art Criticism	3
ARTH 434	Latin American Art	3
BGEN 499	Strategic Management	3
BIOH 458	Neuroscience Research	4
BIOH 462	Principles Medical Physiology	3
CHMY 305E	Ethics, Literature and Writing in the Sciences	3
CLAS 399	Capstone	3
COMX 347	Rhetoric, Nature, and Environmentalism	3
COMX 413	Communication and Conflict-Writing	3

COMX 414	Communication in Personal Relationshps	3
COMX 421	Communication in Nonprofit Organizations	3
COMX 422	Communication and Technology	3
COMX 424	Risk, Crisis, and Communication	3
COMX 445	Rhetorical Criticism and Theory	3
COMX 447	Rhetorical Contruction of Women	3
CSCI 315E	Computers, Ethics, and Society	3
CSCI 499	Senior Thesis/Capstone	1-6
CSD 430	Senior Capstone	3
DANC 494	Junior/Senior Seminar	3
ECNS 481	Communicating Economics	3
ECNS 488	Res Meth & Thesis Design	2
ECNS 499	Senior Thesis/Capstone	2
EDU 339	Teaching & Assessing PK-8 Lang Arts	3
ENST 335L	The Environmental Vision	3
ENST 367	Environmental Politics & Policies	3
ENST 382	Environmental Law	3
ENST 487	Globalization, Justice & Environment	3
GEO 320	Global Water	4
GEO 499	Senior Thesis /Capstone	3-10
GH 484	Novel Ancient and Modern	3
GPHY 335	Water Policy	3
GPHY 433	Community Resilience	3
GPHY 499	Senior Thesis	3
GRMN 351H	German Culture: Beginnings to Romanticism	3
GRMN 352H	Germ Culture: Romanticism to the Present	3
HEE 301	Meth of Secondary HE	3
HSTA 415	The Black Radical Tradition	3
HSTA 417	Prayer & Civil Rights	3
HSTA 461	Research in Montana History	3
HSTA 471	Writing Women's Lives	3
HSTR 400	Historical Research Seminar	3
HSTR 418	Britain 1500 - 1800	3

HSTR 437	US-Latin America Relations	3
JPNS 312	Jpns Lit Medieval to Mod	3
JRNL 340	Intermediate Audio	3
JRNL 352	Intermediate Video Reporting and Producing	3
JRNL 362	Feature Writing	3
JRNL 370	Public Affairs Reporting	3
KIN 447	Analytical & Communicative Techniques	3
LING 473	Language and Culture	3
LING 484	NA Indigenous Lang & Ling	3
LIT 300	Literary Criticism	3
LIT 304	U.S. Writers of Color	3
LIT 314	The American Novel	3
LIT 327	Shakespeare	3
LIT 342	Montana Writers	3
LIT 343	African American Lit	3
LIT 353L	Milton	3
LIT 376	Lit & Other Disciplines	3
LIT 494	Seminar: Lit Capstone	3
M 429	History of Mathematics	3
M 499	Senior Thesis	1-12
MART 450	Topics in Film/Media Studies	3
MCLG 315	Major Hispanic Authors	3
MUSI 415	Music 20th Century to Present	3
MUSI 416	Topics in Music History	3
MUSI 417	Cultural Studies in Music	3
NASX 494	Seminar/Workshop	3
NRSM 465	Foundations of Restoration Ecology	3
PHAR 350	Drug Info	1
PHAR 550	Drug Literature Eval	3
PHL 499	Senior Seminar	3
PHSX 330	Communicating Physics	3
PSCI 400	Adv Writing in Pol Science	1
PSYX 320	Advanced Psychological Research Methods	3

PSYX 400	History & System in Psychology	3
PTRM 451	Tourism & Sustainability	3
PTRM 482	Wilderness & Protected Area Management	3
RUSS 494	Seminar in Russian Studies	1-3
SOCI 438	Seminar in Crime & Deviance	3
SOCI 441	Capstone: Inequal and Soc Just	3
SOCI 488	Writing for Sociology	3
S W 300	Hum Behav & Soc Environ	3
THTR 331Y	Theatre History II	3
WGSS 363	Feminist Theory and Methods	3
WILD 408	Advanced Fisheries	3
WILD 470	Conserv of Wildlife Populatns	4

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:

Course List		
CODE	**TITLE**	**HOURS**
M 104	Numbers as News	3
M 105	Contemporary Mathematics	3
M 115	Probability and Linear Mathematics	3
M 118	118 Mathematics for Music Enthusiasts	3
M 121	College Algebra	3
M 122	College Trigonometry	3
M 132	Numbers and Operations for Elementary School Teachers	3
M 133	Geometry and Measurement for Elementary School Teachers	3
M 151	Precalculus	4
M 162	Applied Calculus	4
M 171	Calculus I	4
M 172	Calculus II	4
M 181	Honors Calculus I	4
M 182	Honors Calculus II	4
STAT 216	Introduction to Statistics	4

or a mathematics course of 3 or more credits for which one of these is a prerequisite.

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

The study of foreign language is a core component of a liberal arts education. Students must complete the first-year sequence of a language or demonstrate comparable proficiency to fulfill the General Education language requirement (test-out provisions apply).

The language requirement can be met in any of the following ways:

1. by achieving a C- or better in a second-semester language course offered at the University of Montana (see list of courses below);
2. by achieving a grade of C- or above in a language course numbered 201 or above at the University of Montana (see list of courses below);
3. by presenting a transcript record of completion with a grade of C- or better of a second- semester (or more advanced) language course at an accredited college or university;
4. by achieving an appropriate score on a placement exam administered by the offering department;
5. by receiving verification of an appropriate level of proficiency in any other natural language in collaboration with the department of World Languages and Cultures. Note that the student's native language, if it is not English, can be used to fulfill this requirement.

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

- read and write if the language is classical, such as Latin or classical Greek;
- speak and aurally comprehend, if the language does not have a written tradition, such as Salish;
- 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;
- demonstrate both receptive (visual comprehension) and expressive (manual production) proficiency if the language is American Sign Language.

The courses listed below require prerequisites be met before registration. The prerequisites for the following courses are listed in the individual course descriptions.

		Course List
CODE	**TITLE**	**HOURS**
ARABIC		
Select one of the following:		3-5
ARAB 102	Elementary Modern Standard Arabic II	
ARAB 201	Intermediate Modern Standard Arabic I	
ARAB 202	Intermediate Modern Standard Arabic II	
ARAB 301	Adv Modern Standard Arabic I	
ARAB 302	Adv Modern Standard Arabic II	
CHINESE		
Select one of the following:		3-5
CHIN 102	Elementary Chinese II	
CHIN 201	Intermediate Chinese I	
CHIN 202	Intermediate Chinese II	
CHIN 301	Advanced Chinese I	
FRENCH		
Select one of the following:		3-4
FRCH 102	Elementary French II	
FRCH 201	Intermediate French I	
FRCH 202	Intermediate French II	
FRCH 301	Adv Grammar/Oral Writ Exprsn	
GERMAN		
Select one of the following:		3-4
GRMN 102	Elementary German II	
GRMN 201	Intermediate German I	
GRMN 202	Intermediate German II	

GRMN 301	German: Oral and Written Expression I	
GRMN 302	German Oral & Written Expresion II	
GREEK		
Select one of the following:		3
GRK 102	Elementary Greek II	
GRK 201	Intermediate Greek I	
GRK 202	Intermediate Greek II	
IRISH		
Select one of the following:		4
IRSH 102		
IRSH 201		
IRSH 202		
ITALIAN		
ITLN 102	Elementary Italian II	4
JAPANESE		
Select one of the following:		4-5
JPNS 102	Elementary Japanese II	
JPNS 201	Intermediate Japanese I	
JPNS 202	Intermediate Japanese II	
JPNS 301	Advanced Japanese	
JPNS 302	Advanced Japanese	
LATIN		
Select one of the following:		3
LATN 102	Elementary Latin II	
LATN 201	Intermediate Latin I	
LATN 202	Intermediate Latin II	
BLACKFOOT		
NASX 142	Elementary Blackfoot II	4
RUSSIAN		
Select one of the following:		3-4
RUSS 102	Elementary Russian II	
RUSS 201	Intermediate Russian I	
RUSS 202	Intermediate Russian II	

RUSS 301	Russian: Oral & Written Expr I	
RUSS 302	Russian: Oral and Writen Expr II	
AMERICAN SIGN LANGUAGE		
SIGN 201	Intermediate American Sign Language	
SPANISH		
Select one of the following:		3-4
SPNS 102	Elementary Spanish II	
SPNS 201	Intermediate Spanish I	
SPNS 202	Intermediate Spanish II	
SPNS 301	Spanish: Oral and Written Expr	

- Students may satisfy the requirement by demonstrating equivalent skill in any of these or other languages in testing administered by the Department of World Languages and Cultures.
- International students from non English speaking countries may satisfy this requirement by presenting a TOEFL score of 580 or greater.

Group III: Exceptions to the Modern and Classical Language Requirement

The extended majors listed below have been granted exceptions to the Modern and Classical Language requirement. Students graduating in any one of these majors are not required to complete the Modern and Classical Language requirement. Students graduating with an Associate of Arts degree have also been granted an exception to the Group III requirements. Missoula College students who continue to Mountain Campus without graduating will need to complete Group III unless their declared four-year major has been granted an exception.

Accounting & Finance, BAS Applied Arts and Science, Biochemistry, Biology, Chemistry, Computer Science, Curriculum & Instruction, Ecosystem Science & Restoration, Forestry, Geoscience, Health and Human Performance, Management Information Systems, Management & Marketing, Mathematics or combined Mathematics /Computer Science or Computer Science/Mathematics, Media Arts - Bachelor of Fine Arts only (BA students take Foreign Language), Medical Laboratory Science, Microbiology, Music and Music Education, Neuroscience, Pharmacy, Parks, Tourism and Recreation Management, Physics and Astronomy (Astronomy, Computational Physics, Teaching Broadfield Science concentrations), Resource Conservation, Theatre - Bachelor of Fine Arts only (BA students take Modern and Classical Language requirement), Wildlife Biology

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 List
CODE	**TITLE**	**HOURS**
ARTZ 103A	Art for Non-Majors	3
ARTZ 105A	Visual Language - Drawing	3
ARTZ 106A	Visual Language - 2-D Fndtns	3
ARTZ 108A	Visual Language - 3-D Fndtns	3
ARTZ 131A	Ceramics for Non-majors	3
ARTZ 211A	Drawing I	3
ARTZ 221A	Painting I	3
ARTZ 231A	Ceramics I	3
ARTZ 251A	Sculpture I	3

ARTZ 271A	Printmaking I	3
ARTZ 284A	Photo I-Techs and Processes	3
ARTZ 302A	Elementary School Art	2
COMX 111A	Introduction to Public Speaking	3
CRWR 210A	Intro Fiction Workshop	3
CRWR 211A	Intro Poetry Workshop	3
CRWR 212A	Intro Nonfiction Workshop	3
CRWR 312A	Intermediate Nonfiction Workshop	3
CRWR 240A	Intro Creative Writing Wrkshp	3
DANC 100A	Introduction to Modern Dance	3
DANC 108A	Dance Forms	3
DANC 110A	Introduction to Ballet	3
DANC 115A	Introduction to Jazz Dance	3
DANC 129A	Dance Performance Lab I	1
DANC 130A	Introduction to Dance	3
DANC 160A	Dance Forms: Irish	2
DANC 165A	Dance Forms: African	3
DANC 170A	Dance Forms: Tribal Belly	2
DANC 200A	Contemporary Modern II	2
DANC 210A	Ballet II	2
DANC 215A	Jazz Dance II	2
DANC 229A	Dance Performance Lab II	1
DDSN 113A	Technical Drafting	3
ENST 373A	Nature Works	3
GDSN 149A	Digital Imaging I	3
JRNL 140A	Intro Radio/Audio Storytelling	3
MART 111A	Intro to Photoshop	3
MART 112A	Introduction to Film Editing	3
MUSI 102A	Performance Study	1-2
MUSI 108A	Orchestra: UMSO	1
MUSI 110A	Opera Theatre I	1
MUSI 111A	Singing for Non-Majors	2
MUSI 112A	Choir	1

MUSI 114A	Band: UM Concert Band	1
MUSI 122A	Percussion Ensemble: UM	1
MUSI 123A	World Percussion Ensemble	1
MUSI 131A	Jazz Ensemble I: UM Jazz Bands	1
MUSI 135A	Keyboard Skills I	1
MUSI 136A	Keyboard Skills II	1
MUSI 155A	Marching: Grizzly Marchng Band	1
MUSI 160A	Beginning Guitar	2
MUSI 162A	Chamber Ensembles I	1
MUSI 267A	Composer's Workshop	1
MUSI 304A	Sound in the Natural World	3
MUST 227A	Mtn Electroacoustc Lptp Ens I	1
THTR 102A	Introduction to Theatre Design	3
THTR 107A	Theat Prod I: Constr Crew	3
THTR 113A	Introduction to Voice Acting	3
THTR 120A	Introduction to Acting I	3
THTR 239A	Creative Drama/Dance: K-8	2

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 List
CODE	**TITLE**	**HOURS**
ARTH 160L	Global Visual Culture	3
ARTH 250L	Introduction to Art Criticism	3
CHIN 313L	Chinese Poetry in Translation	3
CHIN 314L	Traditiona Chinese Literature	3
CLAS 155L	Survey of Greek and Roman Lit	3
CLAS 160L	Classical Mythology	3
CLAS 251L	The Epic	3

CLAS 252L	Greek Drama: Politics on Stage	3
COMX 140L	Introduction to Visual Rhetoric	3
CRWR 115L	Montana Writers Live	3
DANC 234L	Dance in Popular Movies	3
DANC 360L	World Dance	3
ENST 335L	The Environmental Vision	3
FILM 103L	Introduction to Film	3
FILM 271L	Film & Literature	3
GH 151L	Introduction to Western Humanities Antiquity	3
GH 152L	Introduction to the Humanities Medieval to Modern	3
GH 161H	Asian Humanities	3
GH 327L	Gender & Sexuality in Eng Fict	3
GH 328L	Gender Sexuality India	3
GH 351L	Exploring the Humanities	3
GRMN 317L	Intro Multicultural Lit German	3
GRMN 322L	Survey of German Cinema	3
GRMN 340L	Nature and the Environment in German Literature and Film	3
HONR 121L	Ways of Knowing	3
IRSH 345L	Literature in the Irish Lang	3
LIT 110L	Intro to Lit	3
LIT 120L	Poetry	3
LIT 202L	The Environmental Imagination	3
LIT 236L	Literary Histories	3
LIT 246L	Genres, Themes, Approaches	3
LIT 280L	Ecology of Literature	3
LIT 349L	Medieval Lit	3
LIT 350L	Chaucer	3
LIT 353L	Milton	3
LIT 378L	Gay and Lesbian Studies	3
MART 101L	Intro to Media Arts	3
MUSI 101L	Enjoyment of Music	3
MUSI 130L	History of Jazz	3

MUSI 132L	History of Rock & Roll	3
MUSI 133L	Cntry Msc:Cowbys,Opry,Nshville	3
MUSI 202L	Intro to Music Literature	3
NASX 235X	Oral/Written Trads Native Amer	3
NASX 239X	Nat North Amer History & Art	3
PHL 101Y	Introduction to Philosophy	3
PHL 102Y	Topical Intro to Philosophy	3-4
RLST 205L	Introduction to New Testament	3
RLST 225L	Christianity	3
RUSS 306L	Evil and the Supernatural in Russian Literature	3
RUSS 307L	Beauty, Power and Pride in Russian Literature	3
THTR 101L	Introduction to Theatre	3
THTR 235L	Dramatic Literature	3
WGSS 163L	Hist/Lit Persp Women	3

Group VI: Historical Studies (H)

The primary purpose of courses in this perspective is to explore the historical contexts and narratives of human behavior, ideas, institutions, and societies through an analysis of their patterns of development or differentiation in the past. These courses are wide-ranging in chronological, geographical, or topical focus. They introduce students to methods of inquiry that enable them to understand and evaluate the causes and significance of events, texts, or artifacts.

Upon completion of a course in this group, a student will be able to:

1. Critically analyze and evaluate primary sources such as texts, pictorial evidence, oral histories, music, and artifacts- within their respective historical contexts.

2. Synthesize ideas and information in order to understand the problems, causes, and consequences of historical developments and events.

		Course List
CODE	**TITLE**	**HOURS**
AAST 141H	Black: From Africa to Hip-Hop	3
AAST 208H	Africa: From Ancient Egypt to Apartheids Origin	3
ANTY 101H	Anthro & the Human Experience	3
ANTY 102H	Intro to South & S. East Asia	3
ANTY 103H	Intro Latin American Studies	3
ANTY 141H	The Silk Road	3
ANTY 241H	Central Asian Culture and Civ	3
ANTY 251H	Foundations of Civilization	3
ANTY 254H	Arch Wonders of the World	3
ANTY 351H	Archaeology of North America	3

ANTY 354H	Mesoamerican Prehistory	3
ARTH 150H	Introduction to Art History	3
ARTH 161H	Topics in Art	3
ARTH 200H	Art of World Civilization I	3
ARTH 201H	Art of World Civilization II	3
ARTH 202H	Alternative Approaches to Art History	3
ARTH 333H	Architectural History I	3
ARTH 334H	Architectural History II	3
ARTH 433H	Ancient American Art	3
CHIN 211H	Chinese Culture and Civiliz	3
CLAS 180H	Env & Nat in Classical World	3
CLAS 360H	Ancient Greek Civ and Culture	3
COMX 240H	Introduction to Rhetorical Theory	3
ENST 230H	Nature and Society	3
ENST 231H	Nature and Society	3
GH 161H	Asian Humanities	3
GRMN 106H	Introduction to German Culture and Civilization	3
GRMN 351H	German Culture: Beginnings to Romanticism	3
GRMN 352H	Germ Culture: Romanticism to the Present	3
HSTA 101H/103H	American History I	4
HSTA 102H/104H	American History II	4
HSTA 150H	The Veteran's Experience	3
HSTA 342H	Afr Amer Hist to 1865	3
HSTA 343H	Afr Amer Hist Since 1865	3
HSTA 370H	Wmn Amer Colonial to Civil War	3
HSTA 371H	Wmn Amer Civil War to Present	3
HSTR 101H/103H	Western Civilization I	4.000
HSTR 102H/104H	Western Civilization II	4
HSTR 230H	Colonial Latin America	3
HSTR 231H	Modern Latin America	3
HSTR 240H	East Asian Civilizations	3
HSTR 262H	Islamic Civil: Classical Age	3
HSTR 264H	Islamic Civ: Modrn Era	3

HSTR 301X	Ancient Greek Social History	3
HSTR 302H	Ancient Greece	3
HSTR 304H	Ancient Rome	3
JPNS 150H	Japanese Cult & Civiliz	3
JRNL 100H	Media History and Literacy	3
MART 201H	Hist Digital Arts & Culture	3
MUSI 207H	World Music (equiv to 307)	3
MUSI 301H	Music History I	3
MUSI 302H	Music History II	3
NASX 105H	Intro Native Amer Studies	3
NASX 405H	Gndr Iss in Native Amer Stdies	3
PHL 241N	Hist & Philosophy of Science	3
PHL 363H	Ancient Greek and Roman Philosophy	3
RLST 204H	Intro to the Hebrew Bible	3
RLST 232H	Buddhism	3
RLST 238X	Japanese Religions	3
RUSS 105H	Intro to Russian Culture	3
SSEA 202X	Introduction to India	3
THTR 330H	Theatre History I	3

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 List		
CODE	**TITLE**	**HOURS**
ANTY 122S	Race and Minorities	3
ANTY 220S	Culture & Society	3
ANTY 250S	Intro to Archaeology	3
BFIN 205S	Personal Finance	3
BGEN 105S	Introduction to Business	3
BGEN 160S	Issues in Sustainability	3

BMGT 101S	Intro to Entertainment Mgmt	3
COMX 115S	Introduction to Interpersonal Communications	3
COMX 202S	Nonverbal Communication	3
COMX 219S	Survey of Children's Comm	3
COMX 220S	Introduction to Organizational Communication	3
COUN 242S	Intimate Relationships	3
ECNS 101S	Economic Way of Thinking	3
ECNS 201S	Principles of Microeconomics	3
ECNS 202S	Principles of Macroeconomics	3
ENST 225S	Sustainable Communities	3
ENST 489S	Environmental Justice Issues & Solutions	3
GPHY 121S	Human Geography	3
GPHY 141S	Geography of World Regions	3
GPHY 323S	Economic Geography of Rural Areas	3
LING 270S	Intro to Linguistics	3
NRSM 121S	Nature of Montana	3
NRSM 370S	Wildland Conservation Policy/Governance	3
PSCI 210S	Intro to American Government	3
PSCI 220S	Intro to Comparative Government	3
PSYX 100S	Intro to Psychology	3
PSYX 161S	Fund of Organizational Psych	3
PTRM 210S	Nature Tourism & Comm Rec	3
PTRM 217S	Parks & Outdoor Rec. Mgmt.	3
SOCI 101S	Introduction to Sociology	3
SOCI 130S	Soc of Alternative Religions	3
SOCI 211S	Introduction to Criminology	3
SOCI 212S	Social Issues Southeast Asia	3
SOCI 220S	Race, Gender & Class	3
SOCI 260S	Introduction to Juvenile Delinquency	3
SOCI 275S	Gender and Society	3
WGSS 263S	Social and Political Perspectives on Gender and Sexuality	3

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 List		
CODE	**TITLE**	**HOURS**
AHMS 270E	Medical Ethics	3
ANTY 326E	Indigenous Peoples & the Ethics of Development	3
BGEN 220E	Business Ethics and Social Responsibility	3
CHMY 305E	Ethics, Literature and Writing in the Sciences	3
CLAS 365E	The Roots of Western Ethics	3
CSCI 215E	Social & Ethical Issues in CS	3
CSCI 315E	Computers, Ethics, and Society	3
EDU 407E	Ethics & Policy Issues	3
ENST 320E	Earth Ethics	3
GEO 304E	Science and Society	3
GH 389E	Placebos: The Power of Words	3
HONR 122E	Ways of Knowing II	3
HONR 320E	Art of Inquiry: Research and Capstone Seminar	3
HSTR 272E	Terrorism:Viol Mod Wrld	3
HTH 475E	Legal and Ethical Issues Health and Exercise Professions	3
LEG 184E	Legal Ethics	3
NASX 303E	Ecological Perspectives in Native American Traditions	3
NASX 304E	Native American Beliefs/Philos	3
NRSM 349E	Climate Change Ethics/Policy	3
NRSM 389E	Ethics Forestry & Conservation	3
PHAR 514E	Case Studies Pharm Ethics	3
PHL 110E	Introduction to Ethics	3
PHL 112E	Intro Ethics and Environment	3
PHL 114E	Intro to Political Ethics	3
PHL 191	Special Topics (Neuroethics - one time only spring 2020)	3
PHL 210E	Moral Philosophy	3
PHL 317E	Law and Morality	3
PHL 321E	Philosophy & Biomedical Ethics	3
PSCI 250E	Intro to Political Theory	3
RLST 281E	Comparative Ethics	3
S W 410E	Social Work Ethics	3

Group IX: Democracy and Citizenship (Y)

These courses ground students in the ideas, institutions, and practices of democratic societies and their historical antecedents. Knowledge gained through courses in the Y perspective prepares students to understand the rights and responsibilities of engaged citizenship and to assess the characteristics, contributions, and contradictions of democratic systems.

Upon completion of a Democracy and Citizenship course, students will be able to:

1. Demonstrate informed and reasoned understanding of democratic ideas, institutions and practices, from historical and/or contemporary perspectives;
2. Analyze and evaluate the significance and complexities of engaged citizenship; and
3. Articulate the causes and consequences of key historical and/or contemporary struggles within democratic systems or their antecedents, including but not limited to those pertaining to issues of diversity, equity, and justice.

		Course List
CODE	**TITLE**	**HOURS**
ANTY 122S	Race and Minorities	3
ARTH 201H	Art of World Civilization II	3
COMX 205Y	Deliberative Democracy	3
ENST 225S	Sustainable Communities	3
GRMN 340L	Nature and the Environment in German Literature and Film	3
GRMN 351H	German Culture: Beginnings to Romanticism	3
GRMN 352H	Germ Culture: Romanticism to the Present	3
HONR 122E	Ways of Knowing II	3
HSTA 101H/103H	American History I	4
HSTA 102H/104H	American History II	4
HSTA 150H	The Veteran's Experience	3
HSTR 101H/103H	Western Civilization I	4.000
HSTR 102H/104H	Western Civilization II	4
JRNL 100H	Media History and Literacy	3
JRNL 102Y	News Literacy	3
LSCI 210Y	Who Owns Culture? An Introduction to Copyright	3
MUSI 301H	Music History I	3
MUSI 302H	Music History II	3
PHL 101Y	Introduction to Philosophy	3
PHL 102Y	Topical Intro to Philosophy	3-4
PHL 261Y	History of Ancient Philosophy	3
PHL 262Y	History of Modern Philosophy	3
PHL 317E	Law and Morality	3
PSCI 210S	Intro to American Government	3
PTRM 141Y	National Parks and American Culture	3
RUSS 105H	Intro to Russian Culture	3
SOCI 220S	Race, Gender & Class	3
THTR 101L	Introduction to Theatre	3
THTR 331Y	Theatre History II	3

Group X: Cultural & International Diversity (X) - Formerly Indigenous and Global

These courses foster an appreciation for diverse cultures, their histories and values, and their struggles both to maintain their ways of life and to gain equal positions in world spheres of power and change. This includes knowledge of diverse cultures in comparative and thematic frameworks. Knowledge gained through courses in the X perspective prepares students to cultivate ways of thinking that foster an understanding of the complexities of indigenous or international cultures and global issues, past and present.

Upon completion of a course in this group, students will be able to:

1. Demonstrate an understanding of the diverse ways humans structure their social, political, and cultural lives;
2. Interpret human activities, ideas, and institutions with reference to diverse cultural, historical and geo-political perspectives and physical environments; and
3. Recognize the complexities of inter-cultural and international communications and collaborative endeavors, and relate this to the complex challenges of the 21st century.

		Course List
CODE	**TITLE**	**HOURS**
AAST 141H	Black: From Africa to Hip-Hop	3
ANTY 101H	Anthro & the Human Experience	3
ANTY 102H	Intro to South & S. East Asia	3
ANTY 103H	Intro Latin American Studies	3
ANTY 133X	Food and Culture	3
ANTY 141H	The Silk Road	3
ANTY 150X	Archaeology of Yellowstone: 11,000 Years of Native Americans in Yellowstone National Park	3
ANTY 220S	Culture & Society	3
ANTY 241H	Central Asian Culture and Civ	3
ANTY 251H	Foundations of Civilization	3
ANTY 254H	Arch Wonders of the World	3
ANTY 323X	Native Peoples of Montana	3
ANTY 326E	Indigenous Peoples & the Ethics of Development	3
ANTY 330X	Peoples and Cultures of World	3
ANTY 351H	Archaeology of North America	3
ANTY 352X	Archaeology of Montana	3
ARTH 150H	Introduction to Art History	3
ARTH 200H	Art of World Civilization I	3
CAS 140X	Addictions and Diversity	3
CCS 103X	Intro Climate Change:Sci & Soc	3
COMX 204X	International and Development Communication	3
COMX 212X	Introduction to Intercultural Communication	3
DANC 360L	World Dance	3
ECNS 217X	Issues in Economic Development	3

GPHY 121S	Human Geography	3
GPHY 141S	Geography of World Regions	3
GPHY 245X	The Middle East	3
HSTR 230H	Colonial Latin America	3
HSTR 231H	Modern Latin America	3
HSTR 240H	East Asian Civilizations	3
HSTR 301X	Ancient Greek Social History	3
JPNS 150H	Japanese Cult & Civiliz	3
JRNL 105X	Global Current Events	3
LING 375X	Linguistic Ecology and Language Endangerment	3
MUSI 207H	World Music (equiv to 307)	3
NASX 105H	Intro Native Amer Studies	3
NASX 201X	Indian Cultr Exprssd Thru Lang	3
NASX 210X	Native Amer Sports & Games	3
NASX 231X	Indig World View Perspectives	3
NASX 235X	Oral/Written Trads Native Amer	3
NASX 239X	Nat North Amer History & Art	3
NASX 260X	Indig Community Developmnt	3
NASX 303E	Ecological Perspectives in Native American Traditions	3
NASX 304E	Native American Beliefs/Philos	3
NASX 354X	Indians of MT since Rsrvtn Era	3
PSCI 230X	Intro to International Relations	3
PTRM 345X	Sustaining Human Soc & Nat Env	3-6
RLST 232H	Buddhism	3
RLST 234X	Hindu Religious Traditions	3
RLST 238X	Japanese Religions	3
SSEA 202X	Introduction to India	3
WGSS 150X	Women's Rights and Women's Roles Around the World	3

Group XI: Natural Science (N)

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 List
CODE	**TITLE**	**HOURS**
ANTY 210N	Intro to Physical Anthropology	3
ASTR 131N	Planetary Astronomy	3
ASTR 132N	Stars, Galaxies, and the Universe	3
BIOB 130N	Evolution and Society	3
BIOB 160N	Principles of Living Systems	3
BIOB 170N	Princpls Biological Diversity	3
BIOB 210N	Communicating Biology	3
BIOE 172N	Introductory Ecology	3
BIOM 250N	Microbiology for Hlth Sciences	3
BIOO 101N	Survey MT Wildlife & Habitats	3
CHMY 121N	Introduction to General Chemistry	4
CHMY 141N	College Chemistry I	4
CHMY 143N	College Chemistry II	4
CJUS 125N	Fund of Forensic Science	3
CSD 221N	Fundamentals of Acoustics	3
ENSC 105N	Environmental Science	3
ERTH 303N	Weather and Climate	3
GEO 101N	Introduction to Physical Geology	3
GEO 103N	Introduction to Environmental Geology	3
GEO 105N	Oceanography	3
GEO 107N	Natural Disasters	3
GPHY 111N	Intro to Physical Geography	3
GPHY 311N	Biogeography	3
NRGY 101N	Intro to Sustainable Energy	3
NRSM 271N	Conservation Ecology	3
NUTR 221N	Basic Human Nutrition	3
PHAR 110N	Use & Abuse of Drugs	3

PHL 241N	Hist & Philosophy of Science	3
PHSX 141N	Einstein's Relativity	3
PHSX 205N	College Physics I	4
PHSX 207N	College Physics II	4
PHSX 215N	Fund of Physics w/Calc I	4
PHSX 217N	Fund of Physics w/Calc II	4
PSYX 250N	Fund of Biological Psychology	3
SCN 175N	Integrated Physical Science I	3
WILD 105N	Wildlife & People	3

Natural Science courses with a laboratory experience

		Course List
CODE	**TITLE**	**HOURS**
ANTY 213N	Physical Anthropology Lab	1
ASTR 134N	Planetary Astronomy Lab	1
ASTR 135N	Stars, Galaxies, and the Universe Lab	1
ASTR 142N	The Evolving Universe	4
BIOB 101N	Discover Biology	3
BIOB 109N	Montana Ecosystems	3
BIOB 161N	Prncpls of Living Systems Lab	1
BIOB 171N	Princpls Biological Dvrsty Lab	2
BIOB 226N	Gen Science: Earth & Life Sci	5
BIOH 201N	Human Anat Phys I (equiv 301)	4
BIOH 202N	Human Anat and Phys I Lab	4
BIOH 211N	Human Anat Phys II (equiv 311)	4
BIOH 212N	Human Anat Phys II Lab	4
BIOH 213N	The Biology of Behavior	3
BIOO 105N	Introduction to Botany	3
CHMY 142N	College Chemistry I Lab	1
CHMY 144N	College Chemistry II Lab	1
FORS 241N	Dendrology	3
GEO 102N	Introduction to Physical Geology Lab	1
GEO 104N	Introduction to Environmental Geology Laboratory	1
GEO 106N	History of Life	3
GPHY 112N	Intro to Phys Geography Lab	1
NRSM 210N	Soils, Water and Climate	3
PHSX 206N	College Physics I Laboratory	1
PHSX 208N	College Physics II Laboratory	1
PHSX 216N	Physics Laboratory I w/Calc	1
PHSX 218N	Physics Laboratory II w/Calc	1
PHSX 225N	Gen Science: Phys & Chem Sci	5
SCN 260N	The Biology of Behavior	3

Office for Student Success < University of Montana

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.

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.

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 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 100-200 people and have state-of-the-art equipment and in-house technical support.

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.

Colleges, Schools, & Programs

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A

- Accounting B.S.
- Accounting Fundamentals C.A.S.
- Accounting Information Systems Certificate
- Accounting Technology A.A.S.
- Accounting Technology A.A.S. - Computer Support
- Administrative Management A.A.S.
- Administrative Management A.A.S. - Social Media Management
- Advanced Medical Imaging Certificate

- African American Studies Certificate
- African-American Studies B.A.
- African-American Studies Minor
- Anthropology B.A.
- Anthropology B.A. - Archaeology
- Anthropology B.A. - Cultural and Ethnic Diversity
- Anthropology B.A. - Forensic Anthropology
- Anthropology B.A. - Linguistics
- Anthropology B.A. - Medical Anthropology
- Anthropology Minor
- Arabic Studies Minor
- Art B.A.
- Art B.A. (Online Delivery)
- Art B.F.A.
- Art History and Criticism Minor
- Art Studio Minor
- Associate of Arts (A.A.)
- Associate of Arts (A.A.) - Communication Studies
- Associate of Arts (A.A.) - Professional Communication
- Astronomy Minor

B

- Bachelor of Applied Science
- Big Data Analytics Certificate
- Biochemistry B.S.
- Biochemistry B.S. - Health Professions
- Biochemistry Minor
- Bioinformatics Certificate
- Biology B.A. - Biological Education
- Biology B.A. - Natural History
- Biology B.A. - Teacher Preparation General Science Broadfield
- Biology B.S. - Cellular and Molecular Biology
- Biology B.S. - Ecology and Organismal Biology
- Biology B.S. - Field Ecology
- Biology B.S. - Genetics and Evolution
- Biology B.S. - Human Biological Sciences
- Biology Minor
- Business Administration Minor
- Business Media Design C.A.S.

C

- Carpentry C.A.S.
- Central and Southwest Asian Studies B.A.
- Central and Southwest Asian Studies Minor
- Chemistry B.A.
- Chemistry B.S.
- Chemistry B.S. - Environmental Chemistry
- Chemistry B.S. - Forensic Chemistry
- Chemistry B.S. - Pharmacology
- Chemistry Minor
- Chinese Minor
- Classical Civilization Minor
- Classics B.A. - Classical Civilization
- Classics B.A. - Classical Languages
- Classics B.A. - Latin Concentration
- Climate Change Studies Minor
- Communication Studies B.A.
- Communication Studies B.A. - Communication and Human Relationships
- Communication Studies B.A. - Organizational Communication
- Communication Studies B.A. - Rhetoric and Public Discourse
- Communication Studies Minor
- Communicative Sciences and Disorders B.A.
- Communicative Sciences and Disorders Minor
- Community Agriculture Certificate
- Computational Biochemistry B.S.
- Computer Aided Design C.A.S.
- Computer Applications Minor
- Computer Programming Certificate
- Computer Science B.S.
- Computer Science Minor
- Computer Science-Mathematical Sciences (Combined Major)
- Computer Support C.A.S.
- Construction Helper C.T.S.
- Construction Management C.A.S.
- Culinary Arts C.A.S.
- Customer Relations C.A.S.
- Cybersecurity C.T.S.
- Cybersecurity Management Certificate

D

- Dance B.A.
- Dance B.F.A.
- Dance Education Minor
- Dance Minor
- Diesel Technology A.A.S.
- Digital Marketing Certificate
- Doctor of Pharmacy

E

- Early Childhood Education Minor
- Early Childhood Education P-3 B.A.
- East Asian Studies B.A.
- Ecological Restoration Minor
- Economics B.A.
- Economics Minor
- Ecosystem Science and Restoration - Aquatic
- Ecosystem Science and Restoration - Terrestrial
- Elementary Education B.A.
- Energy Auditor C.T.S.
- English as a Second Language Certificate
- English B.A. - Creative Writing
- English B.A. - Linguistics
- English B.A. - Literature
- English B.A. - Literature and the Environment
- English B.A. - Teaching English
- English Minor
- Entertainment Management Certificate
- Entrepreneurship and New Venture Creation Certificate
- Environmental Ethics Certificate
- Environmental Studies B.A.
- Environmental Studies Minor
- Ethics Minor
- European Studies Minor
- Exercise Science - Applied, Health and Human Performance B.S.
- Exercise Science - Pre-Professional, Health and Human Performance B.S.

F

- Facility Management C.A.S.
- Film Studies Minor
- Finance B.S.

- Fire Sciences and Management Minor
- Food Service Management A.A.S.
- Forensic Studies Certificate
- Forestry B.S.
- French B.A.
- French Minor

G

- Geographic Information Systems Certificate
- Geography B.A.
- Geography B.A. - Community and Environmental Planning
- Geography B.S.
- Geography B.S. - Physical Geography
- Geography Minor
- Geosciences B.S.
- Geosciences B.S. - Earth Science Education Concentration
- Geosciences Minor
- German B.A.
- German Minor
- Gerontology Minor
- Global Leadership Certificate
- Global Public Health Minor
- Greek Minor
- Green Building C.T.S.

H

- Health Behavior Coaching Certificate
- Health Communication
- Health Information Technology Certificate
- Heavy Equipment Operation C.A.S.
- Historic Preservation Certificate
- History B.A.
- History B.A. - History Education
- History Minor
- History-Political Science B.A.
- Hospitality Management A.A.S.
- Hospitality Management C.A.S.
- Human and Family Development Minor
- HVAC Technician Certificate

I

- Information Technology A.A.S. - Network Administration and Security
- Information Technology A.A.S. - Programming and App Development
- International Business B.S.
- International Development Studies Minor
- International Field Geosciences Dual
- International Field Geosciences Joint
- Irish Studies Minor

J

- Japanese B.A.
- Japanese Minor
- Journalism B.A.
- Journalism Minor

L

- Language Rejuvenation and Maintenance Certificate
- Latin American Studies Minor
- Latin Minor
- Linguistics B.A.
- Linguistics Minor

M

- Management & Entrepreneurship B.S.
- Management A.A.S. - Entrepreneurship
- Management A.A.S. - Sales and Marketing
- Management Information Systems B.S.
- Marketing B.S.
- Mathematical Sciences-Computer Science B.S. (Combined Major)
- Mathematics B.A.
- Mathematics B.A. - Applied Mathematics
- Mathematics B.A. - Combinatorics and Optimization
- Mathematics B.A. - Mathematics Education
- Mathematics B.A. - Pure Mathematics
- Mathematics B.A. - Statistics
- Mathematics Minor
- Media Arts B.A.
- Media Arts B.F.A
- Media Arts Minor
- Medical Assisting A.A.S.
- Medical Claims Specialist C.T.S.

- Medical Information Technology A.A.S. - Health Information Coding Specialty
- Medical Information Technology A.A.S. - Medical Administrative Assisting
- Medical Laboratory Science B.S.
- Medical Reception C.A.S.
- Microbiology B.S.
- Microbiology B.S. - Microbial Ecology
- Microbiology Minor
- Military Studies Minor
- Music - Bachelor of Arts (B.A.)
- Music - Bachelor of Music (B.M.)
- Music - Bachelor of Music Education (B.M.E)
- Music Minor

N

- Native American Studies B.A.
- Native American Studies Certificate
- Native American Studies Minor
- Neuroscience B.S. - Cellular and Molecular Neuroscience
- Neuroscience B.S. - Cognitive Neuroscience
- Nonprofit Administration Minor
- Northern Rockies Outdoor Leadership Certificate

P

- Paralegal Studies A.A.S.
- Paramedicine A.A.S.
- Parks, Tourism, and Recreation Management B.S.
- Pharmaceutical Sciences B.S.
- Philosophy B.A.
- Philosophy Minor
- Physics B.A.
- Physics B.A. - Astronomy
- Physics B.A. - Computational Physics
- Physics B.A. - Teaching Broadfield Science
- Physics Minor
- Political Science B.A.
- Political Science B.A. - American Politics
- Political Science B.A. - International Relations and Comparative Politics
- Political Science B.A. - Public Administration and Public Policy
- Political Science B.A. - Public Law
- Political Science Minor

- Precision Machine Technology C.A.S.
- Precision Machine Technology C.T.S.
- Psychology B.A.
- Psychology Minor
- Public and Community Health, Health and Human Performance B.S.

R

- Radiologic Technology A.A.S.
- Recycling Technology C.T.S.
- Registered Nursing A.S.
- Resource Conservation B.S.
- Respiratory Care A.A.S.
- Russian B.A.
- Russian Minor
- Russian Studies Minor

S

- Sales and Marketing Certificate
- Secondary Licensure
- Social Work B.A.
- Sociology B.A.
- Sociology B.A. - Criminology
- Sociology B.A. - Inequality and Social Justice
- Sociology Minor
- South and South-East Asian Studies Minor
- Spanish B.A.
- Spanish Minor
- Speech Language Pathology/Audiology Assistant Certificate
- Surgical Technology A.A.S.
- Sustainable Business Strategy Certificate
- Sustainable Construction Technology A.A.S.

T

- Teaching ESL Licensure
- Teaching Library Media Licensure
- Teaching Reading Licensure
- Teaching Special Education Licensure
- Technology in Education Licensure
- Theatre B.A.
- Theatre B.F.A.

- Theatre B.F.A. - Musical Theatre Performance
- Theatre Education Minor
- Theatre Minor

W

- Water Science and Society Certificate
- Welding Technology A.A.S.
- Welding Technology C.A.S.
- Wilderness Studies Minor
- Wildlife Biology - Aquatic
- Wildlife Biology - Terrestrial
- Wildlife Biology Minor
- Women's, Gender and Sexuality Studies B.A.
- Women's, Gender and Sexuality Studies Minor
- World Competencies Certificate

College of the Arts and Media

John DeBoer, Interim Dean

The College of the Arts and Media is comprised of three professionally accredited schools:

- Journalism
- Music
- Theatre and Dance
- Visual and Media Arts

The College of the Arts and Media is committed to leadership in pedagogy, creative scholarship, professional performance, artistic exhibition, and journalistic inquiry. The College prides itself on its high achieving faculty, successful alumni, and talented students who work hard to ensure that the University of Montana serves as the heart of culture and media for the state and region. Each program in the College is designed to:

- Teach students with rigor and devotion by offering in-depth experiential learning that enables them to perform, create, and interrogate big questions of art, culture, and society with specificity and maturity, remaining open to diverse perspective.
- Serve the University, the community, state, region, and nation by presenting high quality concerts, productions, exhibitions, and journalism
- Offer scholarly research opportunities for all disciplines to engage students in theoretical explorations of all forms of arts and media.
- Provide leadership in the arts add media by enhancing the excellence of traditional curricula, instruction, and research with innovative and imaginative programs that utilize new technologies, incorporate various media, and enhance cultural and intellectual environments.
- Inspire students to pursue excellence in their creative and investigative activities and uphold the free expression of complex ideas.

For more information visit the College of the Arts and Media website.

School of Music < University of Montana

School of Music

- Overview
- Programs

James Randall, 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 (B.M.E.);
- Bachelor of Music (B.M.) with advising tracks in:
  - Composition,
  - Voice Performance,
  - Instrumental Performance,
  - Piano Performance, and
  - Organ Performance.
- Bachelor of Arts (B.A.) in Music with advising tracks in:
  - Composition,
  - Music History,
  - Musical Studies,
  - Jazz Studies, and
  - Applied Studies.

Two year graduate degree programs include the Master of Music with areas of specialization in:

- Music Education,
- Performance, and
- Composition.

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 re-audition to gain full admittance into a music major degree program.

Undergraduate

- Music B.A.
- Music B.Mus.
- Music Education B.M.E.

Undergraduate Minors

- Music Minor

Music - Bachelor of Arts (B.A.) < University of Montana

Music - Bachelor of Arts (B.A.)

Bachelor of Arts - Music

College of Arts and Media

Degree Specific Credits: 53-66

Required Cumulative GPA: 2.75

Catalog Year: 2019-2020

Note: Students must complete 51 Credits of non-Music major courses.

General Educational Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

CODE	TITLE	HOURS
Core Music Requirements		39
Music Theory		
Aural Perception		
Keyboard Skills		
Music History		
Humanities		
Applied Study		
Ensembles		
Concert Attendance		
Advanced Writing Requirement for Music		
Bachelor of Arts in Music Advising Tracks		14-27
Composition		
Music History		
Musical Studies		
Jazz Studies		
Applied Studies		
Total Hours		53-66

Course List

Core Music Requirements

Music Theory

CODE	TITLE	HOURS
Complete all of the following courses:		
MUSI 105	Music Theory I	2
MUSI 106	Music Theory II	2
MUSI 205	Music Theory III	2
MUSI 206	Music Theory IV	2
Total Hours		8

Course List

Minimum Required Grade: C-

Aural Perception

CODE	TITLE	HOURS
Complete all of the following courses:		
MUSI 140	Aural Perception I	2
MUSI 141	Aural Perception II	2
MUSI 240	Aural Perception III	2
MUSI 241	Aural Perception IV	2
Total Hours		8

Course List

Minimum Required Grade: C-

Keyboard Skills

CODE	TITLE	HOURS
Complete all of the following courses:		
MUSI 135A	Keyboard Skills I	1
MUSI 136A	Keyboard Skills II	1
Total Hours		2

Course List

Minimum Required Grade: C-

Music History

CODE	TITLE	HOURS
Complete all of the following courses:		
MUSI 301H	Music History I	3
MUSI 302H	Music History II	3
Total Hours		6

Course List

Minimum Required Grade: C-

Humanities

CODE	TITLE	HOURS
Complete all of the following courses:		
GH 151L	Introduction to Western Humanities Antiquity	3
GH 152L	Introduction to the Humanities Medieval to Modern	3
Total Hours		6

Course List

Minimum Required Grade: C-

Applied Study

Notes:

- MUSI 195 is take for one credit each semester for a total of 2 credits in the first year.
- MUSI 296 Upper-Division Required Performance is required to advance to upper division study.

CODE	TITLE	HOURS
Complete all of the following courses:		
MUSI 195	Applied Study I	2
MUSI 296	Piano Prof Assessment	0
Total Hours		2

Course List

Minimum Required Grade: C-

Ensembles

CODE	TITLE	HOURS
Complete 4 credits in the following courses:		4
MUSI 108A	Orchestra: UMSO	
MUSI 112A	Choir	
or MUSI 110A	Opera Theatre I	
MUSI 114A	Band: UM Concert Band	
MUSI 162A	Chamber Ensembles I	
Total Hours		4

Course List

Minimum Required Grade: C-

Concert Attendance

Note: 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 forMUSI 388, 0 cr.

CODE	TITLE	HOURS
Complete the following course:		
MUSI 388	Concert Attendance UM	0
Total Hours		0

Course List

Minimum Required Grade: C-

Advanced Writing Course Requirement for Music

Notes:

- Other advanced writing courses may satisfy this requirement for the Music major at the discretion of the music department.
- Students choosing the Music History Track are required to take all three courses.

CODE	TITLE	HOURS
Complete one of the following courses:		3
MUSI 415	Music 20th Century to Present	
MUSI 416	Topics in Music History	
MUSI 417	Cultural Studies in Music	
Total Hours		3

Course List

Minimum Required Grade: C-

Bachelor of Arts in Music Advising Tracks

Notes:

- For a Bachelor of Arts in Music, you must complete one of the following advising tracks.
- These are advising tracks only and not official programs 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 Track

CODE	TITLE	HOURS
If choosing the Composition track, complete all of the following courses:		
MUSI 202L	Intro to Music Literature	3
MUSI 180	Composition I	2
MUSI 280	Composition II	2
MUSI 380	Composition III	1
MUSI 480	Composition IV	1
MUSI 440	Orchestration	2
MUST 110	Digital Audio & Multitracking	2
MUST 210	Sequencng, Synthesis, Sampling	2
MUSI 356	Form & Analysis I	2
MUSI 357	Form & Analysis II	2
Complete 4 credits in the following courses:		4
MUSE 120	Techs: String Inst in Class I	
MUSE 121	Techs: String Inst in Class II	
MUSE 123	Techniques: Voice	
MUSE 126	Techs: Percussn Instruments I	
MUSE 127	Techs: Percussn Instruments II	
MUSE 272	Techniqus: Flute & Single Reed	
MUSE 273	Techniques: Double Reed	
MUSE 274	Techniques: Upper Brass	
MUSE 275	Techniques: Lower Brass	
Complete 4 credits in the following courses:		4
MUSI 308	Orchestras II: UM	
MUSI 312	Choir III	
or MUSI 310	Opera Theatre II	
MUSI 314	Band III: UM Concert Band	
MUSI 362	Chmbr Ens III: UM	
Total Hours		27

Course List

Minimum Required Grade: C-

Music History Track

CODE	TITLE	HOURS
If choosing the Music History track, complete all of the following courses:		
MUSI 202L	Intro to Music Literature	3
MUSI 207H	World Music (equiv to 307)	3
MUSI 356	Form & Analysis I	2
MUSI 357	Form & Analysis II	2
MUSI 415	Music 20th Century to Present	3
MUSI 416	Topics in Music History	3
MUSI 417	Cultural Studies in Music	3
MUSI 499	Senior Recital/Capstone Pjt	2
Total Hours		21

Course List

Minimum Required Grade: C-

Musical Studies Track

CODE	TITLE	HOURS
If choosing the Musical Studies Track, complete all of the following courses:		
MUSI 202L	Intro to Music Literature	3
MUSI 295	Applied Study II	2
MUSI 395	Applied Study III	1
MUSI 356	Form & Analysis I	2
MUSI 357	Form & Analysis II	2
Complete one credit in the following courses:		4
MUSI 308	Orchestras II: UM	
MUSI 312	Choir III	
or MUSI 310	Opera Theatre II	
MUSI 314	Band III: UM Concert Band	
MUSI 362	Chmbr Ens III: UM	
Total Hours		14

Course List

Minimum Required Grade: C-

Jazz Studies Track

CODE	TITLE	HOURS
If choosing the Jazz Studies Track, complete all of the following courses:		
MUSI 130L	History of Jazz	3
MUSI 295	Applied Study II	2
MUSI 395	Applied Study III	1
MUSI 225	Jazz Theory & Improvisation I	2
MUSI 226	Jazz Theory & Improvisation II	2
MUSI 420	Jazz Pedagogy	3
MUSI 470	Jazz Arranging & Composition	3
MUSI 499	Senior Recital/Capstone Pjt	2
Complete 4 credits of the following courses:		4
MUSI 308	Orchestras II: UM	
MUSI 312	Choir III	
or MUSI 310	Opera Theatre II	
MUSI 314	Band III: UM Concert Band	
MUSI 362	Chmbr Ens III: UM	
Total Hours		22

Course List

Minimum Required Grade: C-

Applied Studies Track

CODE	TITLE	HOURS
If choosing the Applied Studies Track, complete all of the following courses:		
MUSI 202L	Intro to Music Literature	3
MUSI 295	Applied Study II	2
MUSI 395	Applied Study III	2
MUSI 495	Applied Study IV	2
MUSI 356	Form & Analysis I	2
MUSI 357	Form & Analysis II	2
Complete 4 credits of the following courses:		4
MUSI 308	Orchestras II: UM	
MUSI 312	Choir III	
or MUSI 310	Opera Theatre II	
MUSI 314	Band III: UM Concert Band	
MUSI 362	Chmbr Ens III: UM	
Total Hours		17

Course List

Minimum Required Grade: C-

Music - Bachelor of Music (B.M.)

Bachelor of Music

College of the Arts and Media

Degree Specific Credits: 82-93

Required Cumulative GPA: 2.75

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

Course List		
CODE	**TITLE**	**HOURS**
Core Bachelor of Music Requirements		53
Music Theory		
Aural Perception		
Keyboard Skills		
Music History and Culture		
Applied Study		
Literature, Form, and Analysis		
Ensembles		
Concert Attendance		
Senior Recital/Professional Project		
Advanced Writing Requirement for Music		
Bachelor of Music Advising Tracks		29-40
Composition Track		
Voice Track		
Instrumental Performance Track		
Piano Performance Track		
Organ Performance Track		
Total Hours		82-93

Core Bachelor of Music Requirements

Music Theory

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
MUSI 105	Music Theory I	2
MUSI 106	Music Theory II	2
MUSI 205	Music Theory III	2
MUSI 206	Music Theory IV	2
Total Hours		8

Minimum Required Grade: C-

Aural Perception

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
MUSI 140	Aural Perception I	2
MUSI 141	Aural Perception II	2
MUSI 240	Aural Perception III	2
MUSI 241	Aural Perception IV	2
Total Hours		8

Minimum Required Grade: C-

Keyboard Skills

Note: Students choosing the Piano or Organ Performance track are exempt from this requirement as it is fulfilled with additional Applied Study credit.

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
MUSI 135A	Keyboard Skills I	1
MUSI 136A	Keyboard Skills II	1
MUSI 235	Keyboard Skills III	1
MUSI 236	Keyboard Skills IV	1
Total Hours		4

Minimum Required Grade: C-

Music History and Culture

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
MUSI 301H	Music History I	3
MUSI 302H	Music History II	3
MUSI 207H	World Music (equiv to 307)	3
Total Hours		9

Minimum Required Grade: C-

Applied Study

Notes:

- MUSI 195 is take for one credit each semester for a total of 2 credits in the first year.
- MUSI 296 Upper-Division Required Performance is required to advance to upper division study.

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
MUSI 195	Applied Study I	2
MUSI 295	Applied Study II	2
MUSI 395	Applied Study III	1
MUSI 296	Piano Prof Assessment	0
Total Hours		5

Minimum Required Grade: C-

Literature, Form, and Analysis

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
MUSI 202L	Intro to Music Literature	3
MUSI 356	Form & Analysis I	2
MUSI 357	Form & Analysis II	2
Total Hours		7

Minimum Required Grade: C-

Ensembles

Course List		
CODE	**TITLE**	**HOURS**
Complete 4 credits in the following courses:		4
MUSI 108A	Orchestra: UMSO	
MUSI 112A	Choir	
or MUSI 110A	Opera Theatre I	
MUSI 114A	Band: UM Concert Band	
MUSI 162A	Chamber Ensembles I	
Complete 3 credits of the following courses:		3
MUSI 308	Orchestras II: UM	
MUSI 312	Choir III	
or MUSI 310	Opera Theatre II	
MUSI 314	Band III: UM Concert Band	
MUSI 310	Opera Theatre II	
MUSI 331	Jzz Ens II: UM	
MUSI 362	Chmbr Ens III: UM	
Total Hours		7

Minimum Required Grade: C-

Concert Attendance

Note: 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 forMUSI 388, 0 cr.

Course List		
CODE	**TITLE**	**HOURS**
Complete the following course:		
MUSI 388	Concert Attendance UM	0
Total Hours		0

Minimum Required Grade: C-

Senior Recital/Professional Project

Course List		
CODE	**TITLE**	**HOURS**
Complete the following course:		
MUSI 499	Senior Recital/Capstone Pjt	2
Total Hours		2

Minimum Required Grade: C-

Advanced Writing Course Requirement for Music

Notes:

- Other advanced writing courses may satisfy this requirement for the Music major at the discretion of the music department.
- Students choosing the Music History Track are required to take all three courses.

Course List		
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		3
MUSI 415	Music 20th Century to Present	
MUSI 416	Topics in Music History	
MUSI 417	Cultural Studies in Music	
Total Hours		3

Minimum Required Grade: C-

Bachelor of Music Advising Tracks

Notes:

- For a Bachelor of Music, you must complete one of the following advising tracks.
- These are advising tracks only and not official programs 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 Track

Course List		
CODE	**TITLE**	**HOURS**
If choosing the Composition track, complete all of the following courses:		
MUSI 180	Composition I	4
MUSI 280	Composition II	4
MUSI 380	Composition III	6
MUSI 480	Composition IV	3
MUSI 407	Counterpoint I	3
MUSI 440	Orchestration	2
MUST 110	Digital Audio & Multitracking	2
MUST 210	Sequencng, Synthesis, Sampling	2
MUST 310	Interactivity Digitl Sgnl Proc	2
MUST 410	Computer Music Programming	2
MUSI 335	Instrumental Conducting	2
or MUSI 336	Choral Conducting	
MUSI 415	Music 20th Century to Present	3
Total Hours		35

Minimum Required Grade: C-

Voice Track

Course List		
CODE	**TITLE**	**HOURS**
If choosing the Voice track, complete all of the following courses:		
MUSI 281	Diction: English, Italian	2
MUSI 282	Dict: Gmn & French (equiv 382)	2
MUSI 310	Opera Theatre II	2
MUSI 336	Choral Conducting	2
MUSI 342	Vocal Repertoire I	2
MUSI 343	Vocal Repertoire II	2
MUSI 442	Vocal Studio Pedagogy and Lit	2
MUSI 495	Applied Study IV	4
THTR 120A	Introduction to Acting I	3
Complete one of the following language sequences:		8
FRCH 101 & FRCH 102	Elementary French I and Elementary French II	
GRMN 101 & GRMN 102	Elementary German I and Elementary German II	
ITLN 101 & ITLN 102	Elementary Italian I and Elementary Italian II	
Total Hours		29

Minimum Required Grade: C-

Instrumental Performance Track

Note:

- Students choosing the Instrumental Performance track must complete 4 additional credits of MUSI 195 beyond the core requirement for a total of 6 credits.
- Students choosing the Instrumental Performance track must complete 4 additional credits of MUSI 295 beyond the core requirement for a total of 6 credits.
- Students choosing the Instrumental Performance track must complete 7 additional credits of MUSI 395 beyond the core requirement for a total of 8 credits.

Course List		
CODE	**TITLE**	**HOURS**
If choosing the Instrumental Performance track, complete all of the following courses:		
MUSI 335	Instrumental Conducting	2
MUSI 362	Chmbr Ens III: UM	4
MUSI 195	Applied Study I	4
MUSI 295	Applied Study II	4
MUSI 395	Applied Study III	7
MUSI 495	Applied Study IV	8
Total Hours		29

Minimum Required Grade: C-

Piano Performance Track

Note:

- Students choosing the Piano Performance track much complete 2 additional credits of MUSI 195 beyond the core requirement for a total of 4 credits.
- Students choosing the Piano Performance track much complete 4 additional credits of MUSI 295 beyond the core requirement for a total of 6 credits.
- Students choosing the Piano Performance track much complete 7 additional credits of MUSI 395 beyond the core requirement for a total of 8 credits.

Course List		
CODE	**TITLE**	**HOURS**
If choosing the Piano Performance track, complete all of the following courses:		
MUSI 102A	Performance Study	2
MUSI 332	Advanced Functional Piano	1
MUSI 335	Instrumental Conducting	2
or MUSI 336	Choral Conducting	
MUSI 432	Keyboard Literature	3
MUSI 433	Keyboard Literature II	3
MUSI 435	Piano Methods & Materials I	3
MUSI 436	Piano Methods & Materials II	3
MUSI 195	Applied Study I	4
MUSI 295	Applied Study II	4
MUSI 395	Applied Study III	7
MUSI 495	Applied Study IV	8
Total Hours		40

Minimum Required Grade: C-

Organ Performance Track

Note:

- Students choosing the Organ Performance track much complete 4 additional credits of MUSI 195 beyond the core requirement for a total of 6 credits.
- Students choosing the Organ Performance track much complete 4 additional credits of MUSI 295 beyond the core requirement for a total of 6 credits.
- Students choosing the Organ Performance track much complete 7 additional credits of MUSI 395 beyond the core requirement for a total of 8 credits.

Course List		
CODE	**TITLE**	**HOURS**
If choosing the Piano Performance track, complete all of the following courses:		
MUSI 102A	Performance Study	2
MUSI 332	Advanced Functional Piano	1
MUSI 336	Choral Conducting	2
MUSI 435	Piano Methods & Materials I	3
MUSI 436	Piano Methods & Materials II	3
MUSI 195	Applied Study I	4
MUSI 295	Applied Study II	4
MUSI 395	Applied Study III	7
MUSI 495	Applied Study IV	8
MUSI 492	Independent Study (Organ Construction and Design)	2
Complete one of the following language sequences:		8
FRCH 101 & FRCH 102	Elementary French I and Elementary French II	
GRMN 101 & GRMN 102	Elementary German I and Elementary German II	
Total Hours		44

Minimum Required Grade: C-

Music - Bachelor of Music Education (B.M.E)

Individuals interested in teaching in K-12 schools must complete a degree in the content area they want to teach plus the Teacher Education Program through the Department of Teaching and Learning. Individuals must complete the teaching track within that degree program, which may contain different course requirements than the non-teaching track 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 Music Education

College of Arts and Media

Degree Specific Credits: 72

Required Cumulative GPA: 2.75

Catalog Year: 2019-2020

Note: Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. Students apply for admission during their second year. See the Department of Curriculum and Instruction in the College of Education and Human Sciences for more information.

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

Course List		
CODE	**TITLE**	**HOURS**
Technique Courses		9
Music Theory, Methods, and History		45
Marching Band		1
Applied Study		7
Concert Attendance See requirement		0
Ensemble Requirements		7
Writing Requirement for Music Education		3
Secondary Teaching Licensure		
Total Hours		72

Technique Courses

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
MUSE 120	Techs: String Inst in Class I	1
MUSE 121	Techs: String Inst in Class II	1
MUSE 274	Techniques: Upper Brass	1
MUSE 275	Techniques: Lower Brass	1
MUSE 123	Techniques: Voice	1
MUSE 272	Techniqus: Flute & Single Reed	1
MUSE 273	Techniques: Double Reed	1
MUSE 126	Techs: Percussn Instruments I	1
MUSE 127	Techs: Percussn Instruments II	1
Total Hours		9

Minimum Required Grade: C-

Music Theory, Methods, and History

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
Music Theory:		
MUSI 105	Music Theory I	2
MUSI 106	Music Theory II	2
MUSI 205	Music Theory III	2
MUSI 206	Music Theory IV	2
Keyboard Skills:		
MUSI 135A	Keyboard Skills I (MUSI 332 should be taken by keyboard principals)	1
or MUSI 332	Advanced Functional Piano	
MUSI 136A	Keyboard Skills II (MUSI 435 should be taken by keyboard principals)	1
or MUSI 435	Piano Methods & Materials I	
MUSI 235	Keyboard Skills III	1
MUSI 236	Keyboard Skills IV	1
MUSI 296	Piano Prof Assessment (must be completed prior to moving on to upper-division courses)	0
Aural Perception:		

MUSI 140	Aural Perception I	2
MUSI 141	Aural Perception II	2
MUSI 240	Aural Perception III	2
MUSI 241	Aural Perception IV	2
Methods and Literature:		
MUSE 333	Gen Music Methods & Materls I	2
MUSE 334	Gen Music Methods & Materls II	2
MUSI 440	Orchestration	2
MUSE 425	Technology and Materials	2
MUSE 497	Methods (Taken twice: Choral and Instrumental)	4
Conducting:		
MUSI 335	Instrumental Conducting	2
MUSI 336	Choral Conducting	2
Music History:		
MUSI 202L	Intro to Music Literature	3
MUSI 301H	Music History I	3
MUSI 302H	Music History II (This course satisfies the Intermediate Writing Requirement)	3
Total Hours		45

Minimum Required Grade: C-

Marching Band

Note: String, Voice, and Keyboard principals required to take only 1 credit of MUSI 155A. Wind/percussion principals must take 2.

Course List		
CODE	**TITLE**	**HOURS**
Complete the following course:		
MUSI 155A	Marching: Grizzly Marchng Band	1-2

Minimum Required Grade: C-

Applied Study

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
MUSI 102A	Performance Study (Taken for 1 credit each in the Spring of the third year and Fall of the fourth year)	2
MUSI 195	Applied Study I (1 credit each semester in the first year of study)	2
MUSI 295	Applied Study II (1 credit each semester in the second year of study)	2
MUSI 395	Applied Study III (Taken in Fall of third year)	1
Total Hours		7

Minimum Required Grade: C-

Concert Attendance

Note: 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 the following course:

Course List		
CODE	**TITLE**	**HOURS**
Complete the following course:		
MUSI 388	Concert Attendance UM	0

Minimum Required Grade: C-

Ensemble Requirements

Lower-Division Ensemble Requirement

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.) One credit must be taken each semester for two credits each year.

Course List		
CODE	**TITLE**	**HOURS**
Complete 4 credits in one of the following courses:		4
MUSI 108A	Orchestra: UMSO (String principals)	
MUSI 112A	Choir (Voice principals)	
or MUSI 110A	Opera Theatre I	
MUSI 114A	Band: UM Concert Band (Instrumental Principals)	
MUSI 162A	Chamber Ensembles I (Piano and Guitar principals)	
Total Hours		4

Minimum Required Grade: C-

Upper-Division Ensemble Requirement

Note: These are to be taken for 1 credit each semester for a total of two credits during the the third year and for 1 credit during the Fall semester of the 4th year.

Course List		
CODE	**TITLE**	**HOURS**
Complete 3 credits in the following courses:		3
MUSI 308	Orchestras II: UM (String principals)	
MUSI 312	Choir III (Voice Principals)	
or MUSI 310	Opera Theatre II	
MUSI 314	Band III: UM Concert Band (Instrumental principals)	
MUSI 362	Chmbr Ens III: UM (Piano and Guitar principals)	
Total Hours		3

Minimum Required Grade: C-

Writing Requirement for Music Education

Advanced Writing Requirement

Course List		
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		3
MUSI 415	Music 20th Century to Present	
MUSI 416	Topics in Music History	
MUSI 417	Cultural Studies in Music	
Total Hours		3

Minimum Required Grade: C-

Secondary Teaching Licensure

Note: For endorsement to teach Music, a student also must gain admission to the Teacher Education Program and meet all the requirements for secondary teaching licensure. For more information, see the Teaching and Learning Department.

Music Minor < University of Montana

Music Minor

Minor - Music

College of Arts and Media

Degree Specific Credits: 27

Required Cumulative GPA: 2.75

Catalog Year: 2019-2020

Notes:

- 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.

Summary

CODE	TITLE	HOURS
Minor Requirements		15
Elective Options		12
Performance		
Theory		
Music Theory		
Composition		
Music Technology		
Total Hours		27

Course List

Minor Requirements

Notes: Ensembles must be taken concurrently with MUSI 195. MUSI 195 is taken for 1 credit each semester for a total of 2 credits for the year.

CODE	TITLE	HOURS
Complete all of the following courses:		
MUSI 105	Music Theory I	2
MUSI 106	Music Theory II	2
MUSI 140	Aural Perception I	2
MUSI 141	Aural Perception II	2
MUSI 195	Applied Study I	2
MUSI 202L	Intro to Music Literature	3
Complete 2 credits in the following courses:		2
MUSI 108A	Orchestra: UMSO	
MUSI 110A	Opera Theatre I	
MUSI 112A	Choir	
MUSI 114A	Band: UM Concert Band	
MUSI 155A	Marching: Grizzly Marchng Band	
MUSI 131A	Jazz Ensemble I: UM Jazz Bands	
MUSI 162A	Chamber Ensembles I	
Total Hours		15

Course List

Minimum Required Grade: C-

Elective Options

Rule: Complete one of the following minor option tracks. 12 total credits required.

Performance

Note:

- MUSI 295 and MUSI 395 1 credit each semester for a year total of 2 credits. Two year total of 4 credits in these Applied Studies.
- MUSI 308-MUSI 314, MUSI 362A, MUSI 391 Ensembles for four credits must be taken concurrently with MUSI 295 and MUSI 395.

CODE	TITLE	HOURS
If choosing the Performance option, complete all of the following courses:		
MUSI 295	Applied Study II	2
MUSI 395	Applied Study III	2
Complete 4 credits in the following courses:		4
MUSI 308	Orchestras II: UM	
MUSI 310	Opera Theatre II	
MUSI 312	Choir III	
MUSI 314	Band III: UM Concert Band	
MUSI 362	Chmbr Ens III: UM	
Complete 4 credits in the following courses:		4
MUSI 205	Music Theory III	
MUSI 206	Music Theory IV	
MUSI 301H	Music History I	
MUSI 302H	Music History II	
Other 300-400 level performance or academic classes approved by the advisor		
Total Hours		12

Course List

Minimum Required Grade: C-

Theory

CODE	TITLE	HOURS
Complete all of the following courses:		
MUSI 205	Music Theory III	2
MUSI 206	Music Theory IV	2
MUSI 240	Aural Perception III	2
MUSI 241	Aural Perception IV	2
MUSI 356	Form & Analysis I	2
MUSI 357	Form & Analysis II	2
Total Hours		12

Course List

Minimum Required Grade: C-

Music History

Note: Although worth 4 total credits., MUSI 205 and MUSI 206 are strongly recommended. Other courses may be substituted at the discretion of the advisor.

CODE	TITLE	HOURS
Complete all of the following courses:		
MUSI 205	Music Theory III	2
MUSI 206	Music Theory IV	2
MUSI 301H	Music History I	3
Complete 2 of the following courses:		6
MUSI 415	Music 20th Century to Present	
MUSI 416	Topics in Music History	
MUSI 417	Cultural Studies in Music	
Total Hours		13

Course List

Minimum Required Grade: C-

Composition

Notes:

- MUSI 180 must be taken for 1 credit per semester for a total of 4 credits,
- MUSI 280 must be taken for 1 credit per semester for a total of 4 credits,

CODE	TITLE	HOURS
Complete all of the following courses:		
MUSI 135A	Keyboard Skills I	1
MUSI 180	Composition I ( )	4
MUSI 207H	World Music (equiv to 307)	3
MUSI 280	Composition II	4
Total Hours		12

Course List

Minimum Required Grade: C-

Music Technology

CODE	TITLE	HOURS
Complete all of the following courses:		
MUST 110	Digital Audio & Multitracking	2
MUST 210	Sequencng, Synthesis, Sampling	2
MUST 310	Interactivity Digitl Sgnl Proc	2
MUST 227A	Mtn Electroacoustc Lptp Ens I	1
MUSI 207H	World Music (equiv to 307)	3
MUST 410	Computer Music Programming	2
Total Hours		12

Course List

Minimum Required Grade: C-

School of Journalism < University of Montana

School of Journalism

- Overview
- Programs

Ray Fannning, Director of Faculty Affairs

Denise Dowling, Director of Student Success

Courses in the School of Journalism examine the news media -- emphasizing their history, privileges and ethical responsibilities -- and provide instruction in skills required for a wide array of careers that require gathering, verifying and disseminating news and information in the Digital Age. The School of Journalism offers a Bachelor of Arts in Journalism and a minor in Journalism.

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 must complete 72 credits outside of journalism, including the University's general education requirements.

For further information about the school's Master of Arts program in Environmental Science and Natural Resource Journalism, contact the

Director of Graduate Studies in Journalism, Nadia White
School of Journalism
University of Montana
Missoula, MT 59812
or (406) 243-2227.

Lower-Division Core

In the first three or four semesters of study students take courses in the major and in the liberal arts and sciences. Journalism courses must be taken at University of Montana-Missoula, though the directors may occasionally accept substitutes taught at another school with programs accredited by the Accrediting Council for Education in Journalism and Mass Communication. 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 during either autumn or spring semester.

Upper-Division Core

Students may begin taking upper division courses after they complete the lower division prerequisites for those courses.

Academic Progression

The general University academic standing requirements are listed separately in this catalog. See index.

Journalism majors must maintain satisfactory academic progress. Any student whose GPA falls below a 2.5 must meet with his or her advisor to discuss the student's progress before classes resume the following semester.

Undergraduate

- Journalism B.A.

Undergraduate Minors

- Journalism Minor

University Of Montana

Journalism B.A.

Bachelor of Arts - Journalism

College of Arts and Media

Degree Specific Credits: 37-38

Required Cumulative GPA: 2.5

Catalog Year: 2019-2020

Degree Specific Requirements:

- Students must complete at least 37 and no more than 48 JRNL credits.
- Students must complete at least 72 total credits outside of Journalism.
- The school strongly recommends students complete the first-year sequence of an approved language course or equivalent by exam before applying to the professional program.

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

Course List		
CODE	**TITLE**	**HOURS**
Lower-Division Core Requirements		12
Upper-Division Core Requirements		7-8
Capstone		3
Upper Division Electives		15
Total Hours		37-38

Lower-Division Core Requirements

Rule: Students must maintain a 2.5 overall GPA and 2.5 GPA in the Journalism Lower-Division Core.

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
JRNL 100H	Media History and Literacy (Prerequisite for JRNL 270)	3
JRNL 170	Elements of News Writing (Prerequisite for JRNL 270)	3
JRNL 257	Beginning Visual Journalism (Prerequisite for JRNL 328 and 350)	3
JRNL 270	Reporting (Co-requisite for JRNL 328 and 350; prerequisite for all other UD JRNL courses)	3
Total Hours		12

Minimum Required Grade: C-

Upper-Division Core Requirements

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
JRNL 300	First Amendment and Journalism Law	3
JRNL 400	Ethics & Trends in News Media	3
JRNL 498	Supervised Internship	1-2
Total Hours		7-8

Minimum Required Grade: C-

Capstone

Note: Please see your advisor for additional courses that may satisfy this requirement.

		Course List
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		3
JRNL 410	Native News Honors Project	
JRNL 411	Reporting Native News	
JRNL 412	Montana Journalism Review	
JRNL 440	Advanced Audio	
JRNL 470	Covering Elections	
JRNL 471	Covering the Legislature	
JRNL 473	International Reporting	
JRNL 480	Advanced Video Reporting	
JRNL 481	Adv Video Photo and Directing	
JRNL 488	Student Documentary Unit	
Total Hours		3

Minimum Required Grade: C-

Upper-Division Electives

Course List		
CODE	**TITLE**	**HOURS**
Complete five of the following courses:		15
JRNL 328	Intermediate Photojournalism	
JRNL 330	News Editing	

JRNL 331	Intermediate Web Reporting	
JRNL 332	Social Media and Audience	
JRNL 340	Intermediate Audio	
JRNL 350	Intermediate Video Photography	
JRNL 342	Multimedia Sports Announcing and Writing	
JRNL 351	Intermediate Video Directing	
JRNL 352	Intermediate Video Reporting and Producing	
JRNL 362	Feature Writing	
JRNL 370	Public Affairs Reporting	
JRNL 410	Native News Honors Project	
JRNL 411	Reporting Native News	
JRNL 412	Montana Journalism Review	
JRNL 414	Investigations	
JRNL 427	Advanced Photo & Multimedia Storytelling	
JRNL 428	Freelance Photography	
JRNL 429	Documentary Photojournalism	
JRNL 430	Print & Web Editing & Design	
JRNL 431	Online Journalism	
JRNL 432	Social Media and Audience II	
JRNL 433	Marketing Your Work	
JRNL 440	Advanced Audio	
JRNL 470	Covering Elections	
JRNL 471	Covering the Legislature	
JRNL 472	Opinion Writing	
JRNL 473	International Reporting	
JRNL 480	Advanced Video Reporting	
JRNL 481	Adv Video Photo and Directing	
JRNL 482	Advanced Video Storytelling	
JRNL 488	Student Documentary Unit	
JRNL 494	Pollner Seminar	
Total Hours		15

Minimum Required Grade: C-

Journalism Minor < University of Montana

Journalism Minor

Minor - Journalism

College of Arts and Media

Degree Specific Credits: 21

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Summary

CODE	TITLE	HOURS
Core Courses		18
Additional courses		3
Total Hours		21

Course List

Core Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
JRNL 100H	Media History and Literacy	3
JRNL 170	Elements of News Writing	3
JRNL 257	Beginning Visual Journalism	3
JRNL 270	Reporting	3
JRNL 300	First Amendment and Journalism Law	3
JRNL 400	Ethics & Trends in News Media	3
Total Hours		18

Course List

Minimum Required Grade: C-

Additional courses

CODE	TITLE	HOURS
Complete 1 additional JRNL upper-division elective.		3
Total Hours		3

Course List

Minimum Required Grade: C-

School of Theatre and Dance < University of Montana

School of Theatre and Dance

- Overview
- Programs

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. 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 and the CoMotion Dance Project, professional touring companies based at UM, often involve 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. Students are invited into the BFA after an audition/interview process. Areas of BFA specialization are: Acting, Design & Technology, Choreography & Performance, Musical Theatre Performance and Teaching. Graduate programs lead to the Master of Arts in Theatre with a focus on either performance theory/criticism or teaching or the Master of Fine Arts in Theatre with areas of specialization in Acting, Design & Technology, Directing, or Music Directing.

For more information on the academic programs and to learn about Theatre & Dance productions, please visit our website.

Advisement

Each Theatre & Dance major or minor 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 Student Handbook.

Undergraduate

- Dance B.A.
- Dance B.F.A.
- Theatre B.A.
- Theatre B.F.A.
- Theatre B.F.A. - Concentration in Musical Theatre Performance

Undergraduate Minors

- Dance
- Dance Specialization Education
- Theatre
- Theatre Education

Dance B.A. < University of Montana

Dance B.A.

Bachelor of Arts - Dance

College of Arts and Media

Degree Specific Credits: 39-51

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: There is an Admission Audition that prospective majors must pass during the first year to continue in the program.

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

CODE	TITLE	HOURS
Lower-Division Core		20-27
Required Courses		
Costuming Experience		
Ballet Experience I		
Jazz Experience I		
Upper-Division Core		14
Required Courses		
Modern Experience I		
Performance Experience		
Junior Project		
Senior Project		
Major Electives		5-10
Technique Experience II		
Elective Courses		
Total Hours		39-51

Course List

Lower-Division Core

Rule: Complete the following subcategories. 20-27 total credits required.

Required Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
DANC 165A	Dance Forms: African	3
DANC 194	Seminar/Workshop	1
DANC 200A	Contemporary Modern II	2
DANC 220	Creative Practice I	2
THTR 102A	Introduction to Theatre Design	3
THTR 106	Theat Prod I: Run Crew	1
Total Hours		12

Course List

Minimum Required Grade: C-

Costuming Experience

Note: For THTR 107A choose one from these four sections:

- Section 02: Costume Shop on MW,
- Section 03: Light Shop on MW,
- Section 05: Costume Shop on TR, or
- Section 06: Light Shop on TR.

CODE	TITLE	HOURS
Complete one of the following courses:		3
THTR 107A	Theat Prod I: Constr Crew (Section 02, 03, 05 or 06)	
THTR 245	Int Costume Construction	
Total Hours		3

Course List

Minimum Required Grade: C-

Ballet Experience I

CODE	TITLE	HOURS
Complete 3-7 credits in the following courses (three semesters):		3-7
DANC 110A	Introduction to Ballet	
DANC 210A	Ballet II	
DANC 310	Ballet III	
DANC 410	Ballet IV	
Total Hours		3-7

Course List

Minimum Required Grade: C-

Jazz Experience I

CODE	TITLE	HOURS
Complete 2-5 credits in the following courses (two semesters):		2-5
DANC 115A	Introduction to Jazz Dance	
DANC 215A	Jazz Dance II	
DANC 315	Jazz III	
Total Hours		2-5

Course List

Minimum Required Grade: C-

Upper-Division Core

Rule: Complete the following subcategories. 14 total credits required.

CODE	TITLE	HOURS
Complete all of the following courses:		
DANC 305	Contact Improvisation	2
DANC 334	Dance History	2
DANC 494	Junior/Senior Seminar	3
Total Hours		7

Course List

Minimum Required Grade: C-

Modern Experience I

CODE	TITLE	HOURS
Complete 3 credits in the following courses (three semesters):		3
DANC 300	Contemporary Modern III	
DANC 400	Contemporary Modern IV	
DANC 404	Advanced Contemporary Modern	
Total Hours		3

Course List

Minimum Required Grade: C-

Performance Experience

Note: Registration and credit load based on casting for Theatre & Dance productions. Performing in one piece equals one credit.

CODE	TITLE	HOURS
Complete the following course:		2
DANC 327	Advanced Rehearsal and Performance	
Total Hours		2

Course List

Minimum Required Grade: C-

Junior Project

Note: Junior projects must be planned with the student's project advisor and all journals and papers will be submitted to that advisor.

CODE	TITLE	HOURS
Complete the following course:		
DANC 399	Jr Creat/Research Proj	1
Total Hours		1

Course List

Minimum Required Grade: C-

Senior Project

CODE	TITLE	HOURS
Complete the following course:		
DANC 499	Senior Thesis/Creative Project	1
Total Hours		1

Course List

Minimum Required Grade: C-

Major Electives

Rule: Complete the following subcategories. 5-10 total credits required.

Technique Experience II

CODE	TITLE	HOURS
Complete 2-4 credits in the following courses (two semesters):		2-4
DANC 215A	Jazz Dance II	
DANC 300	Contemporary Modern III	
DANC 310	Ballet III	
Total Hours		2-4

Course List

Minimum Required Grade: C-

Elective Courses

CODE	TITLE	HOURS
Complete two of the following courses:		3-6
DANC 295	Student Teaching: Childrens Dance	
DANC 320	Creative Practice II	
DANC 360L	World Dance	
DANC 380	Science of Dance Movement	
DANC 406	Dance as a Healing Art	
DANC 440	Dance Pedagogy	
DANC 497	Methods: Tchng Movmnt in Schls	
THTR 220	Acting I	
Total Hours		3-6

Course List

Minimum Required Grade: C-

University Of Montana

Dance B.F.A.

Bachelor of Fine Arts - Dance

College of the Arts and Media

Degree Specific Credits: 60-65

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: Students who intend to pursue the Bachelor of Fine Arts will normally enter the University as Bachelor of Arts students in Dance. There is an Admission Audition that prospective majors must pass during the first year to continue in the program.

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

		Course List
CODE	**TITLE**	**HOURS**
Lower-Division Core		21-22
Required Courses		
Costuming Experience		
Jazz Experience		
Production Experience I		
Community Experience		
Upper-Division Core		26
Advising Track		13-17
Required Courses		
Ballet Experience		
Stage Management Course		
Junior Project		
Senior Project		
Choreography & Performance Track		
Teaching Track		
Total Hours		60-65

Lower-Division Core

Rule: Complete the following subcategories. 21-22 total credits required.

Required Courses

		Course List
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
DANC 165A	Dance Forms: African	3
DANC 194	Seminar/Workshop	1
DANC 200A	Contemporary Modern II	2
DANC 220	Creative Practice I	2
DANC 295	Student Teaching: Children's Dance	1
THTR 102A	Introduction to Theatre Design	3
THTR 106	Theat Prod I: Run Crew	1
Total Hours		13

Minimum Required Grade: C-

Costuming Experience

Note: For THTR 107A: choose either Section 02: Costume Shop on MW or Section 05: Costume Shop on TR.

Course List		
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		3
THTR 107A	Theat Prod I: Constr Crew (either Section 02 or 05)	
THTR 245	Int Costume Construction	
Total Hours		3

Minimum Required Grade: C-

Jazz Experience

Course List		
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		1-2
DANC 215A	Jazz Dance II	
DANC 315	Jazz III	
Total Hours		1-2

Minimum Required Grade: C-

Production Experience I

Note: Registration and credit load based on casting for Theatre & Dance productions. Performing in one piece equals one credit. May be taken credit/no credit.

Course List		
CODE	**TITLE**	**HOURS**
Complete 2 credits of the following course (two semesters):		2
DANC 225	Rehearsal & Performance	
Total Hours		2

Minimum Required Grade: C-

Community Experience

Course List		
CODE	**TITLE**	**HOURS**
Complete 2 credits of the following course (two semesters):		2
DANC 227	Community Dance Initiatives	
Total Hours		2

Minimum Required Grade: C-

Upper-Division Core

Rule: Complete the following subcategories.

Required Courses

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
DANC 305	Contact Improvisation	2
DANC 334	Dance History	2
DANC 360L	World Dance	3
DANC 380	Science of Dance Movement	3
DANC 406	Dance as a Healing Art	2
DANC 440	Dance Pedagogy	2
DANC 494	Junior/Senior Seminar	3
Total Hours		17

Minimum Required Grade: C-

Ballet Experience

Course List		
CODE	**TITLE**	**HOURS**
Complete 6 credits in the following courses (six semesters):		6
DANC 310	Ballet III	
DANC 410	Ballet IV	
Total Hours		6

Minimum Required Grade: C-

Stage Management Course

Note: Registration will be based on production assignment as determined by Dance faculty.

Course List		
CODE	**TITLE**	**HOURS**
Complete the following course:		
DANC 329	Dance Stage Management Practicum	1
Total Hours		1

Minimum Required Grade: C-

Junior Project

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 List		
CODE	**TITLE**	**HOURS**
Complete the following course:		
DANC 399	Jr Creat/Research Proj	1
Total Hours		1

Minimum Required Grade: C-

Senior Project

Note: Senior projects must be planned with the student's project advisor and all journals and papers will be submitted to that advisor.

Course List		
CODE	**TITLE**	**HOURS**
Complete the following course:		
DANC 499	Senior Thesis/Creative Project	1
Total Hours		1

Minimum Required Grade: C-

Advising Tracks

Choreography & Performance Track

Note: 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.

Rule: Complete the following subcategories. 17 total credits required.

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
ACT 250	Pilates (May be taken credit/no credit)	1
DANC 320	Creative Practice II	2
DANC 405	Advanced Improvisation	2
Total Hours		5

Minimum Required Grade: C-

Production Experience II

Note: Registration and credit load based on casting for Theatre & Dance productions. Performing in one piece equals one credit.

Course List		
CODE	**TITLE**	**HOURS**
Complete the following course:		2
DANC 327	Advanced Rehearsal and Performance	
Total Hours		2

Minimum Required Grade: C-

Modern Experience II

Course List		
CODE	**TITLE**	**HOURS**
Complete 2 credits in the following course (two semesters):		2
DANC 300	Contemporary Modern III	
Total Hours		2

Minimum Required Grade: C-

Modern Experience III

Course List		
CODE	**TITLE**	**HOURS**
Complete 2 credits in the following course (two semesters):		2
DANC 400	Contemporary Modern IV	
Total Hours		2

Minimum Required Grade: C-

Modern Experience IV

Course List		
CODE	**TITLE**	**HOURS**
Complete 2 credits in the following course (two semesters):		2
DANC 400	Contemporary Modern IV	
Total Hours		2

Minimum Required Grade: C-

Cross-Training Elective

Note: May be taken credit/no credit.

Course List		
CODE	**TITLE**	**HOURS**
Complete one credit in any ACT course chosen with your advisor.		1
Total Hours		1

Minimum Required Grade: C-

Acting Experience

Course List		
CODE	**TITLE**	**HOURS**
Complete the following course:		
THTR 220	Acting I	3
Total Hours		3

Minimum Required Grade: C-

Teaching Track

Note: 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.

Rule: Complete the following subcategories. 13 total credits required.

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
DANC 320	Creative Practice II	2
DANC 345	New Visions Dance	1
Total Hours		3

Minimum Required Grade: C-

Teaching Assistant Experience

Note: Completion of these 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 List		
CODE	**TITLE**	**HOURS**
Complete 2 credits in the following course:		2
DANC 446	Teaching Projects	
Total Hours		2

Minimum Required Grade: C-

In-Schools Experience

Course List		
CODE	**TITLE**	**HOURS**
Complete the following course:		
DANC 497	Methods: Tchng Movmnt in Schls	2
Total Hours		2

Minimum Required Grade: C-

Modern Experience II

Course List		
CODE	**TITLE**	**HOURS**
Complete 6 credits in the following courses (six semesters):		6
DANC 300	Contemporary Modern III	
DANC 400	Contemporary Modern IV	
Total Hours		6

Minimum Required Grade: C-

Secondary Teaching Licensure

Note: For endorsement to teach Dance, a student also must gain admission to the Teacher Education Program and meet all the requirements for secondary teaching licensure. For more information, see the Teaching and Learning Department.

University Of Montana

Dance Education Minor

Minor - Dance Education

College of the Arts and Media

Degree Specific Credits: 18-20

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: Individuals completing this minor in Dance Education must also complete the teaching track of a 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 Teaching and Learning in the College of Education for more information.

Summary

Course List		
CODE	**TITLE**	**HOURS**
Lower-Division Core		6
Composition		
Community Experience		
Student Teaching Experience I		
Upper-Division Core		12-14
Required Courses		
Student Teaching Experience II		
In-Schools Experience		
Technique Experience I		
Technique Experience II		
Total Hours		18-20

Lower-Division Core

Rule: Complete the following subcategories. 6 total credits required.

Composition

Course List		
CODE	**TITLE**	**HOURS**
Complete the following course:		
DANC 220	Creative Practice I	2
Total Hours		2

Minimum Required Grade: C-

Community *Experience*

Course List		
CODE	**TITLE**	**HOURS**
Complete 2 credits of the following course:		2
DANC 227	Community Dance Initiatives	
Total Hours		2

Minimum Required Grade: C-

Student Teaching *Experience I*

		Course List
CODE	**TITLE**	**HOURS**
Complete 2 credits of the following course:		2
DANC 295	Student Teaching: Children's Dance	
Total Hours		2

Minimum Required Grade: C-

Upper-Division Core

Rule: Complete the following subcategories. 12-14 total credits required.

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
DANC 360L	World Dance	3
DANC 440	Dance Pedagogy	2
Total Hours		5

Minimum Required Grade: C-

Student Teaching Experience II

Course List		
CODE	**TITLE**	**HOURS**
Complete 2 credits of the following course:		2
DANC 345	New Visions Dance	
Total Hours		2

Minimum Required Grade: C-

In-School Experience

Course List		
CODE	**TITLE**	**HOURS**
Complete the following course:		
DANC 497	Methods: Tchng Movmnt in Schls	2
Total Hours		2

Minimum Required Grade: C-

Technique Experience I

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
DANC 300	Contemporary Modern III	1
DANC 310	Ballet III	1
Total Hours		2

Minimum Required Grade: C-

Technique Experience II

Note: Other Social, Cultural/World, or Traditional/Indigenous technique courses may meet this requirement with the approval of the program.

Course List		
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		1-3
DANC 160A	Dance Forms: Irish	
DANC 165A	Dance Forms: African	
DANC 315	Jazz III	
Total Hours		1-3

Minimum Required Grade: C-

Secondary Teaching Licensure

Note: For endorsement to teach Dance, a student also must gain admission to the Teacher Education Program and meet all the requirements for secondary teaching licensure. For more information, see the Teaching and Learning Department.

Dance Minor < University of Montana

Dance Minor

Minor - Dance

College of Arts and Media

Degree Specific Credits: 18-33

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Summary

CODE	TITLE	HOURS
Lower-Division Core		14-25
Composition		
Modern Experience I		
Ballet Experience I		
Jazz Experience		
Technique Experience		
Costume Experience		
Upper-Division Core		2
Minor Electives		2-6
Total Hours		18-33

Course List

Lower-Division Core

Rule: Complete the following subcategories. 14-25 total credits required.

Composition

CODE	TITLE	HOURS
Complete the following course:		
DANC 220	Creative Practice I	2
Total Hours		2

Course List

Minimum Required Grade: C-

Modern Experience I

CODE	TITLE	HOURS
Complete 3-7 credits in the following courses (three semesters):		3-7
DANC 100A	Introduction to Modern Dance	
DANC 200A	Contemporary Modern II	
DANC 300	Contemporary Modern III	
DANC 400	Contemporary Modern IV	
DANC 404	Advanced Contemporary Modern	
Total Hours		3-7

Course List

Minimum Required Grade: C-

Ballet Experience I

CODE	TITLE	HOURS
Complete 3-7 credits in the following courses (three semesters):		3-7
DANC 110A	Introduction to Ballet	
DANC 210A	Ballet II	
DANC 310	Ballet III	
DANC 410	Ballet IV	
Total Hours		3-7

Course List

Minimum Required Grade: C-

Jazz Experience

CODE	TITLE	HOURS
Complete one of the following courses:		1-3
DANC 115A	Introduction to Jazz Dance	
DANC 215A	Jazz Dance II	
DANC 315	Jazz III	
Total Hours		1-3

Course List

Minimum Required Grade: C-

Technique Experience

CODE	TITLE	HOURS
Complete one of the following courses:		2-3
DANC 165A	Dance Forms: African	
DANC 200A	Contemporary Modern II	
DANC 210A	Ballet II	
DANC 215A	Jazz Dance II	
Total Hours		2-3

Course List

Minimum Required Grade: C-

Costume Experience

Note: For THTR 107A: choose either Section 02: Costume Shop on MW or Section 05: Costume Shop on TR.

CODE	TITLE	HOURS
Complete one of the following courses:		3
THTR 102A	Introduction to Theatre Design	
THTR 107A	Theat Prod I: Constr Crew (Section 02 or 05)	
THTR 245	Int Costume Construction	
Total Hours		3

Course List

Minimum Required Grade: C-

Upper-Division Core

CODE	TITLE	HOURS
Complete the following course:		
DANC 334	Dance History	2
Total Hours		2

Course List

Minimum Required Grade: C-

Minor Electives

Note: ACT 250 may be taken credit/no credit

CODE	TITLE	HOURS
Complete two of the following courses:		2-6
ACT 250	Pilates	
DANC 227	Community Dance Initiatives	
DANC 295	Student Teaching: Childrens Dance	
DANC 305	Contact Improvisation	
DANC 360L	World Dance	
DANC 380	Science of Dance Movement	
DANC 406	Dance as a Healing Art	
Total Hours		2-6

Course List

Minimum Required Grade: C-

Theatre B.A. < University of Montana

Theatre B.A.

Bachelor of Arts - Theatre

College of Arts and Media

Degree Specific Credits: 43-45

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

CODE	TITLE	HOURS
Lower-Division Core		18
Required Courses		
Shop Experience I		
Upper-Division Core		10
Required Courses		
Senior Project		
Advising Tracks		15-17
Bachelor of Arts in Theatre Track		
Theatre Education Endorsement Preparation Track		
Total Hours		43-45

Course List

Lower-Division Core

Rule: Complete the following subcategories. 18 total credits required.

CODE	TITLE	HOURS
Complete all of the following courses:		
THTR 102A	Introduction to Theatre Design	3
THTR 103	Introd to House Management	1
THTR 106	Theat Prod I: Run Crew	1
THTR 202	Stagecraft I	3
THTR 206	Theat Prod II: Run Crew	1
THTR 220	Acting I	3
THTR 235L	Dramatic Literature	3
Total Hours		15

Course List

Minimum Required Grade: C-

Shop Experience I

Note: Students may select one of the following sections:

- Scene Shop
- Costume Shop
- Light Shop

CODE	TITLE	HOURS
Complete the following course:		
THTR 107A	Theat Prod I: Constr Crew	3
Total Hours		3

Course List

Minimum Required Grade: C-

Upper-Division Core

Rule: Complete the following subcategories. 10 total credits required.

CODE	TITLE	HOURS
Complete all of the following courses:		
THTR 330H	Theatre History I	3
THTR 331Y	Theatre History II	3
THTR 375	Directing I	3
Total Hours		9

Course List

Minimum Required Grade: C-

Senior Project

Note: This course must be taken during student's final semester.

CODE	TITLE	HOURS
Complete the following course:		
THTR 499	Senior Project (take during final semester)	1
Total Hours		1

Course List

Minimum Required Grade: C-

Bachelor of Arts in Theatre Track

Rule: Complete the following subcategories. 15 total credits required.

Shop Experience II

- Students may select one of the following sections:
  - Scene Shop
  - Costume Shop
  - Light Shop
- Students must take different shop section than the one taken for the lower-division core requirement.
- 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.

CODE	TITLE	HOURS
Complete the following course:		
THTR 107A	Theat Prod I: Constr Crew	3
Total Hours		3

Course List

Minimum Required Grade: C-

Focus Area (acting, costumes, literature/history, scenery, etc.)

Note: Art, Dance, Media Arts, Music, and/or Theatre courses may count toward these required electives with approval from advisor.

CODE	TITLE	HOURS
Complete 12 credits in the following areas:		12
Art (ART)		
Art History (ARTH)		
Dance (DANC)		
Media Arts (MAR or MART)		
Music (MUSI, MUSE, or MUST)		
Theatre (THTR)		
Total Hours		12

Course List

Minimum Required Grade: C-

Theatre Education Endorsement Track

Notes:

- This teaching track contains different/additional course requirements designed to meet state standards. Those interested in teaching in K-12 schools must complete the teaching track of a major in a teaching content area plus the Teacher Education Program through the Department of Teaching and Learning. Additional teaching areas can be added through completion of the teaching track of a major or minor in that content area.
  - Secondary Education Licensure Program
  - Licensure Degree Requirements
- To complete this teaching track, you need to contact the Teaching and Learning Department. You do not fill out a major/minor form for graduation or the major/minor/concentration section of the major change form. Approvals for this track must come from the Teaching and Learning Department.
- Tracks will not appear on your UM transcript, diploma, university lists, student data system, or university publications. They are used for advising purposes only. You do not fill out a major change for a track.
- This major does not qualify as a single field endorsement. Individuals must complete the teaching track of a second major or minor in another teaching content area. The demand in Montana high schools for teaching of courses in this field is limited. The required second endorsement should be in a field in high demand.

Theatre Education Endorsement Track Requirements

CODE	TITLE	HOURS
Complete all of the following courses:		
THTR 210	Voice & Speech I	3
THTR 221	Acting II	3
THTR 320	Acting III	3
THTR 370	Stage Management I	2
THTR 371	Stage Mgmt Pract I	1-3
THTR 439	Methods of Teaching Theatre	3
Total Hours		15-17

Course List

Minimum Required Grade: C-

Secondary Teaching Licensure

Note: For endorsement to teach Theatre, a student also must gain admission to the Teacher Education Program and meet all the requirements for secondary teaching licensure. For more information, see the Teaching and Learning Department.

Theatre B.F.A. < University of Montana

Theatre B.F.A.

Bachelor of Fine Arts - Theatre

College of Arts and Media

Degree Specific Credits: 75-77

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: Students who intend to pursue the Bachelor of Fine Arts in Theatre in the Acting or Design & Technology tracks will normally enter the University as Bachelor of Arts students in Theatre. Students who intend to pursue the Bachelor of Fine Arts in Theatre with a concentration in Musical Theatre Performance will normally enter the University as probationary Bachelor of Fine Arts students in Theatre; their status will be reevaluated at the mid-program audition at the end of their third semester.

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

CODE	TITLE	HOURS
Lower-Division Core		15
Required Courses		
Shop Experience I		
First-Year Seminar		
Upper-Division Core		6
Theatre History		
Advanced Writing		
Advising Tracks		54-56
Acting Track		
Design & Technology Track		
Total Hours		75-77

Course List

Lower-Division Core

Rule: Complete the following subcategories. 15 total credits required.

Required Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
THTR 103	Introd to House Management	1
THTR 106	Theat Prod I: Run Crew	1
THTR 202	Stagecraft I	3
THTR 220	Acting I	3
THTR 235L	Dramatic Literature	3
Total Hours		11

Course List

Minimum Required Grade: C-

Shop Experience I

Note: Students may select one of the following shop sections:

- Scene Shop
- Costume Shop
- Light Shop

CODE	TITLE	HOURS
Complete the following course:		
THTR 107A	Theat Prod I: Constr Crew	3
Total Hours		3

Course List

Minimum Required Grade: C-

First-Year Seminar

CODE	TITLE	HOURS
Complete one of the following courses:		1
C&I 194	Freshman Seminar I	
DANC 194	Seminar/Workshop	
THTR 194	Seminar/ Workshop	
Total Hours		1

Course List

Minimum Required Grade: C-

Upper-Division Core

Theatre History

CODE	TITLE	HOURS
Complete the following course:		
THTR 330H	Theatre History I	3
Total Hours		3

Course List

Minimum Required Grade: C-

Advanced Writing

CODE	TITLE	HOURS
Complete one of the following courses:		3
MUSI 416	Topics in Music History	
MUSI 417	Cultural Studies in Music	
THTR 331Y	Theatre History II	
Total Hours		3

Course List

Minimum Required Grade: C-

Acting Track

Notes:

- Students who intend to pursue the acting track will normally enter the University as Bachelor of Arts students in Theatre. They should then declare intent to pursue the BFA degree no later than the beginning of the second year of a four-year program. Admission is granted by audition in the second year at the end of the third or fourth semester.
- 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.

Rule: Complete the following subcategories. 54-56 total credits required.

Required Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
DANC 100A	Introduction to Modern Dance	3
MAR 470	Adv. Acting for Film I	3
THTR 206	Theat Prod II: Run Crew	1
THTR 210	Voice & Speech I	3
THTR 211	Voice & Speech II	3
THTR 221	Acting II	3
THTR 249	Stage Makeup	2
THTR 315	Physical Performance Skills I	3
THTR 320	Acting III	3
THTR 321	Contemporary Acting Practice	3
THTR 415	Stage Combat	3
THTR 420	Advanced Acting: Comedy Styles	3
THTR 421	Advanced Acting: Shakespeare	3
THTR 425	Acting VII	3
THTR 484	Adv Acting: Professionl Skills	1
Total Hours		40

Course List

Minimum Required Grade: C-

Senior Project

Note: This course must be taken during student's final semester.

CODE	TITLE	HOURS
Complete the following course:		
THTR 499	Senior Project	1
Total Hours		1

Course List

Minimum Required Grade: C-

Voice Course

CODE	TITLE	HOURS
Complete three credits from the following courses:		3
THTR 310	Voice and Speech III	
THTR 311	Voice and Speech IV: Poetic Language	
MUSI 102A	Performance Study	
MUSI 110A	Opera Theatre I	
MUSI 111A	Singing for Non-Majors	
MUSI 112A	Choir	
MUSI 162A	Chamber Ensembles I	
MUSI 195	Applied Study I	
MUSI 295	Applied Study II	
MUSI 310	Opera Theatre II	
MUSI 362	Chmbr Ens III: UM	
MUSI 395	Applied Study III	
MUSI 495	Applied Study IV	
Modern and Classical Language		
Total Hours		3

Course List

Minimum Required Grade: C-

Staging Experience

CODE	TITLE	HOURS
Complete one of the following courses:		2-3
THTR 370	Stage Management I	
THTR 375	Directing I	
Total Hours		2-3

Course List

Minimum Required Grade: C-

Production Experience

Note: Registration based on casting for Theatre & Dance productions.

CODE	TITLE	HOURS
Complete three credits of the following course:		3
THTR 395	Practicum	
Total Hours		3

Course List

Minimum Required Grade: C-

Lower-Division Enrichment Electives

CODE	TITLE	HOURS
Complete one of the following courses:		2-3
DANC 220	Creative Practice I	
MART 112A	Introduction to Film Editing	
THTR 102A	Introduction to Theatre Design	
THTR 207	Theat Prod II: Constr Crew	
THTR 245	Int Costume Construction	
THTR 264	Master Electrician	
Total Hours		2-3

Course List

Minimum Required Grade: C-

Upper-Division Enrichment Electives

CODE	TITLE	HOURS
Complete 3 credits in the following areas:		3
Art (ARTZ)		
Art History (ARTH)		
Creative Writing (CRWR)		
Dance (DANC)		
Global Leadership (GBLD)		
Honors (HONR)		
Literature (LIT)		
Media Arts (MAR or MART)		
Music (MUSI, MUSE, or MUST)		
Theatre (THTR)		
Total Hours		3

Course List

Minimum Required Grade: C-

Design & Technology Track

Notes:

- Students who intend to pursue the design & technology track will normally enter the University as Bachelor of Arts students in Theatre. They should then declare intent to pursue the BFA degree no later than the beginning of the second year of a four-year program. Students wishing to pursue a BFA in Theatre in the design & technology track must:
- Complete a one-year residency at the UM-Missoula campus which includes a minimum of 12 credits in design & technology.
- Attain a cumulative 2.5 overall GPA and a 3.0 GPA in design & technology coursework.
- Present a theatre resume and portfolio consisting of class and production work.
- Prepare a written statement explaining their educational and professional goals.

- 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.

Rule: Complete the following subcategories. 55 total credits required.

Required Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
THTR 102A	Introduction to Theatre Design	3
THTR 155	Drawing Fundamntls for Theatre	3
THTR 206	Theat Prod II: Run Crew	1
THTR 255	Drafting for Theatre I	3
THTR 370	Stage Management I	2
Total Hours		12

Course List

Minimum Required Grade: C-

Shop Experiences

CODE	TITLE	HOURS
Complete the following courses:		
Shop Experience II and III - Complete 2 of the following: Scene Shop, Costume Shop, or Light Shop		
THTR 107A	Theat Prod I: Constr Crew	6
Shop Experience IV - Select shop in primary area of emphasis after completing Shop Experiences I-III.		
THTR 307	Production Construction I	3
Total Hours		9

Course List

Minimum Required Grade: C-

Upper-Division Drafting Requirement

CODE	TITLE	HOURS
Complete one of the following courses:		3
THTR 345	Flat Pattern Des & Drafting	
THTR 355	Computer Aid Draft & Appl	
Total Hours		3

Course List

Minimum Required Grade: C-

Junior Project

CODE	TITLE	HOURS
Complete one of the following courses:		2
THTR 308	Production Team I	
THTR 309	Production Design I	
Total Hours		2

Course List

Minimum Required Grade: C-

Senior Project

CODE	TITLE	HOURS
Complete one of the following courses:		3
THTR 408	Production Team II	
THTR 409	Production Design II	
Total Hours		3

Course List

Minimum Required Grade: C-

Design & Technology Electives

Notes:

- Courses should be selected based on primary and secondary areas of interest in consultation with an advisor.
- A minimum of 12 credits must be upper-division.

CODE	TITLE	HOURS
Complete 26 elective credits in consultation with an advisor. 12 credits must be upper-division.		26
Total Hours		26

Course List

Minimum Required Grade: C-

Theatre B.F.A. - Musical Theatre Performance

Bachelor of Fine Arts - Theatre; Musical Theatre Concentration

College of Arts and Media

Degree Specific Credits: 84-90

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: Students who intend to pursue the Bachelor of Fine Arts in Theatre will normally enter the University as Bachelor of Arts students in Theatre. Students who intend to pursue the Bachelor of Fine Arts in Theatre with a concentration in Musical Theatre Performance will enter the University as probationary Bachelor of Fine Arts students; their status will be reevaluated at the mid-program audition at the end of their third semester.

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

		Course List
CODE	**TITLE**	**HOURS**
Lower-Division Core		15
Required Courses		
Shop Experience I		
First-Year Seminar		
Upper-Division Core		6
Theatre History		
Advanced Writing		
Musical Theatre Performance Concentration		63-69
Theatre Courses		
Senior Project		
Music Courses		
Music Applied Study		
Dance Composition		
Modern Experience I		
Ballet Experience		
Jazz Experience		
Technique Experiences		
Dance Electives		
Production Experience		
Total Hours		84-90

Lower-Division Core

Rule: Complete the following subcategories. 15 total credits required.

Required Courses

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
THTR 103	Introd to House Management	1
THTR 106	Theat Prod I: Run Crew	1
THTR 202	Stagecraft I	3
THTR 220	Acting I	3
THTR 235L	Dramatic Literature	3
Total Hours		11

Minimum Required Grade: C-

Shop Experience I

Note: Students may select one of the following shop sections:

- Scene Shop
- Costume Shop
- Light Shop

Course List		
CODE	**TITLE**	**HOURS**
Complete the following course:		
THTR 107A	Theat Prod I: Constr Crew	3
Total Hours		3

Minimum Required Grade: C-

First-Year Seminar

		Course List
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		1
COLS 194	Freshman Seminar I	
DANC 194	Seminar/Workshop	
THTR 194	Seminar/ Workshop	
Total Hours		1

Minimum Required Grade: C-

Upper-Division Core

Theatre History

Course List		
CODE	**TITLE**	**HOURS**
Complete the following course:		
THTR 330H	Theatre History I	3
Total Hours		3

Minimum Required Grade: C-

Advanced Writing

Course List		
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		3
MUSI 416	Topics in Music History	
MUSI 417	Cultural Studies in Music	
THTR 331Y	Theatre History II	
Total Hours		3

Minimum Required Grade: C-

Musical Theatre Performance Concentration

Notes:

- Students who intend to pursue the Musical Theatre Performance concentration will normally enter the University as probationary Bachelor of Fine Arts students in Theatre with a concentration in Musical Theatre Performance. They should declare intent to pursue the BFA degree no later than the beginning of the second year of the four-year program. Final admission is granted by audition in the second year at the end of the third semester.
- In order to maintain healthy practice, students must take at least one singing and dance technique course each semester in the program. Introductory courses will include an initial skill assessment to determine the appropriate placement level.

Rule: Complete the following subcategories.

Theatre Courses

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
THTR 210	Voice & Speech I	3
THTR 221	Acting II	3
THTR 249	Stage Makeup	2
THTR 320	Acting III	3
THTR 322	Musical Theatre Audition Techniques	2
THTR 410	Advanced Acting: Musical Theatre	2
THTR 484	Adv Acting: Professionl Skills	1
Total Hours		16

Minimum Required Grade: C-

Senior Project

Note: This course must be taken during student's final semester.

Course List		
CODE	**TITLE**	**HOURS**
Complete the following course:		
THTR 499	Senior Project	1
Total Hours		1

Minimum Required Grade: C-

Music Courses

		Course List
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
MUSI 105	Music Theory I	2
MUSI 106	Music Theory II	2
MUSI 112A	Choir	2
MUSI 135A	Keyboard Skills I	1
MUSI 136A	Keyboard Skills II	1
MUSI 140	Aural Perception I	2
MUSI 141	Aural Perception II	2
MUSI 391	ST: Musical Theatre Workshop	2
MUSI 362	Chmbr Ens III: UM	1
Total Hours		15

Minimum Required Grade: C-

Music Applied Study

Note: Students must take two credits of Applied Study each semester.

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
MUSI 195	Applied Study I	4
MUSI 295	Applied Study II	4
MUSI 395	Applied Study III	4
MUSI 495	Applied Study IV	4
Total Hours		16

Minimum Required Grade: C-

Dance Composition

Course List		
CODE	**TITLE**	**HOURS**
Complete the following course:		
DANC 220	Creative Practice I	2
Total Hours		2

Minimum Required Grade: C-

Modern Experience

		Course List
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		1-3
DANC 100A	Introduction to Modern Dance	
DANC 200A	Contemporary Modern II	
DANC 300	Contemporary Modern III	
DANC 400	Contemporary Modern IV	
DANC 404	Advanced Contemporary Modern	
Total Hours		1-3

Minimum Required Grade: C-

Ballet Experience

Course List		
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		1-3
DANC 110A	Introduction to Ballet	
DANC 210A	Ballet II	
DANC 310	Ballet III	
DANC 410	Ballet IV	
Total Hours		1-3

Minimum Required Grade: C-

Jazz Experience

Course List		
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		1-3
DANC 115A	Introduction to Jazz Dance	
DANC 215A	Jazz Dance II	
DANC 315	Jazz III	
Total Hours		1-3

Minimum Required Grade: C-

Technique Experiences

		Course List
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
DANC 108A	Dance Forms (Tap)	1
DANC 217	Musical Theatre Styles	2
Total Hours		3

Minimum Required Grade: C-

Dance Electives

Note: Course should be selected based on primary and secondary areas of interest in consultation with an advisor.

Course List		
CODE	**TITLE**	**HOURS**
Complete 4 elective DANC credits in consultation with an advisor.		4
Total Hours		4

Minimum Required Grade: C-

Production Experience

Note: Registration based on casting for Theatre & Dance productions.

Course List		
CODE	**TITLE**	**HOURS**
Complete the following course:		
THTR 395	Practicum	3
Total Hours		3

Minimum Required Grade: C-

Theatre Education Minor < University of Montana

Theatre Education Minor

Minor - Theatre Education

College of Arts and Media

Degree Specific Credits: 21

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: Individuals completing this minor in Theatre Education must also complete the teaching track of a 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 Teaching and Learning in the College of Education for more information.

Summary

CODE	TITLE	HOURS
Lower-Division Core		10
Upper-Division Core		11
Total Hours		21

Course List

Lower-Division Core

CODE	TITLE	HOURS
Complete all of the following courses:		
THTR 106	Theat Prod I: Run Crew	1
THTR 202	Stagecraft I	3
THTR 220	Acting I	3
THTR 235L	Dramatic Literature	3
Total Hours		10

Course List

Minimum Required Grade: C-

Upper-Division Core

CODE	TITLE	HOURS
Complete all of the following courses:		
THTR 330H	Theatre History I	3
THTR 370	Stage Management I	2
THTR 375	Directing I	3
THTR 439	Methods of Teaching Theatre	3
Total Hours		11

Course List

Minimum Required Grade: C-

Secondary Teaching Licensure

Note: For endorsement to teach Theatre, a student also must gain admission to the Teacher Education Program and meet all the requirements for secondary teaching licensure. For more information, see the Teaching and Learning Department.

Theatre Minor < University of Montana

Theatre Minor

Minor - Theatre

College of Arts and Media

Degree Specific Credits: 22

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Summary

CODE	TITLE	HOURS
Lower-Division Core		7
Shop Experience		
Introductory/Foundational Experience		
Production Experience		
Theory/Literature/History Experience		3
Theatre Minor Focus Area		12
Total Hours		22

Course List

Lower-Division Core

Rule: Complete the following subcategories. 7 total credits required.

Shop Experience

Note: When registering for THTR 107A, students may select one of the following sections:

- Scene Shop, Section 01 or 04
- Costume Shop, Section 02 or 05
- Light Shop, Section 03 or 06

CODE	TITLE	HOURS
Complete the following course:		
THTR 107A	Theat Prod I: Constr Crew	3
Total Hours		3

Course List

Minimum Required Grade: C-

Introductory/Foundational Experience

CODE	TITLE	HOURS
Complete one of the following courses:		3
THTR 101L	Introduction to Theatre	
THTR 102A	Introduction to Theatre Design	
THTR 113A	Introduction to Voice Acting	
THTR 120A	Introduction to Acting I	
Total Hours		3

Course List

Minimum Required Grade: C-

Production Experience

CODE	TITLE	HOURS
Complete one of the following courses:		1
THTR 103	Introd to House Management	
THTR 106	Theat Prod I: Run Crew	
THTR 395	Practicum	
Total Hours		1

Course List

Minimum Required Grade: C-

Theory/Literature/History Experience

CODE	TITLE	HOURS
Complete one of the following courses:		3
THTR 202	Stagecraft I	
THTR 235L	Dramatic Literature	
THTR 330H	Theatre History I	
THTR 331Y	Theatre History II	
Total Hours		3

Course List

Minimum Required Grade: C-

Theatre Minor Focus Area

Note: An advisor in Theatre & Dance must be consulted for guidelines regarding one's specific focus. Dance, Media Arts, or Music courses may count toward these required electives with approval from advisor.

CODE	TITLE	HOURS
Complete 12 credits in a focus area (acting, costumes, literature/history, scenery, etc.) selected with your advisor. 8 of these credits must be upper-division.		12
Total Hours		12

Course List

Minimum Required Grade: C-

School of Visual and Media Art < University of Montana

School of Visual and Media Art

- Overview
- Programs

Art

Kevin Bell, 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.

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

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 the Media Arts website.

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; ARTZ 106A; and ARTZ 108A.

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 ,
  - ten color works for ARTZ 106A, and/or
  - ten 3-D pieces for ARTZ 108A.

Transfer Students

Students with transfer credits from another institution must contact the school director for review of transfer transcripts to assess course equivalents.

Undergraduate

- Art B.A.
- Art B.A. (Online Delivery)
- Art B.F.A
- Media Arts B.A.
- Media Arts B.F.A

University Of Montana

Undergraduate Minors

- Art History and Criticism
- Art Studio
- Media Arts

Art B.A. < University of Montana

Art B.A.

Bachelor of Arts - Art

College of Arts and Media

Degree Specific Credits: 57

Required Cumulative GPA: 3.0

Catalog Year: 2019-2020

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

CODE	TITLE	HOURS
Shared Foundation Requirements		18
Intermediate Studio Requirements		15
Intermediate Art History, Theory, and Criticism		6
Upper-Division Studio Requirement		12
Upper-Division Art History Requirement		3
Upper-Division Art Criticism Requirement		3
Art Education Licensure		
Total Hours		57

Course List

Shared Foundation Requirements

Note: All courses are required unless waived via departmental advanced placement policy.

CODE	TITLE	HOURS
Complete all of the following courses:		
ARTH 150H	Introduction to Art History	3
ARTZ 105A	Visual Language - Drawing	3
GDSN 149A	Digital Imaging I	3
MART 101L	Intro to Media Arts	3
MART 112A	Introduction to Film Editing	3
Complete one of the following courses:		
ARTZ 108A	Visual Language - 3-D Fndtns	3
or MART 120	Creative Coding I	
Total Hours		18

Course List

Minimum Required Grade: C

Intermediate Studio Requirements

Notes:

- 9 credits must be taken from the ARTZ and GDSN prefixes at the 200-level.
- The remaining 6 credits may be taken from the ARTZ and GDSN prefixes at the 200-level, and from MART at the 200- or 300-level.
- If ARTZ 108A (Visual Language: 3D Design) is not taken as part of the Shared Foundation Requirements, then the student must take three credits of a 3D studio course at the Intermediate Level.
- These courses fulfill the requirements of Thematic Area groups of Time, Digital, and Material.

CODE	TITLE	HOURS
Complete 15 credits in the following areas:		15
Art (ARTZ) at the 200-level		
Graphic Design (GDSN) at the 200-level		
Media Arts (MAR or MART) at the 200- or 300-level		
Total Hours		15

Course List

Minimum Required Grade: C

Intermediate History, Theory, and Criticism

Note: These courses fulfill the requirements of Thematic Area group of History and Theory.

CODE	TITLE	HOURS
Complete all of the following courses:		
ARTH 201H	Art of World Civilization II	3
ARTH 250L	Introduction to Art Criticism	3
Total Hours		6

Course List

Minimum Required Grade: C

Upper-Division Studio Requirements

Note:

- 9 credits must be from the ARTZ or GDSN prefixes.
- The remaining 3 credits may be from the ARTZ, GDSN, or MART prefixes.
- These courses should be chosen in consultation with your advisor.

CODE	TITLE	HOURS
Complete 12 credits from the following areas at the 300- or 400-levels:		12
Art (ARTZ)		
Graphic Design (GDSN)		
Media Arts (MAR or MART)		
Total Hours		12

Course List

Minimum Required Grade: C

Upper-Division Art History Requirement

Notes:

- These courses should be chosen in consultation with your advisor.
- This course fulfills the requirement of Thematic Area group of History and Theory.

CODE	TITLE	HOURS
Complete 3 credits in Art History (ARTH) at the 300- and 400-level.		3
Total Hours		3

Course List

Minimum Required Grade: C

Upper-Division Art Criticism Requirement

Note: This course fulfills the requirement of Thematic Area group of History and Theory.

CODE	TITLE	HOURS
Complete the following course:		
ARTH 350	Contemp Art and Art Criticism	3
Total Hours		3

Course List

Minimum Required Grade: C

Art Education Licensure Requirements

Art Education licensure is earned by taking classes in both the School of Visual and Media Arts and the Phyllis J. Washington College of Education. 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.

University Of Montana

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, ARTZ 403 as well as THTR 239A or DANC 497. In addition, students are required to take 35 credits of EDU classes and a Native American Studies Course. Please see the College of Education and Human Sciences for more details.

Teaching Art Track

Notes:

- This teaching track contains different/additional course requirements designed to meet state standards. Those interested in teaching in K-12 schools must complete the teaching track of a major in a teaching content area plus the Teacher Education Program through the Department of Teaching and Learning. Additional teaching areas can be added through completion of the teaching track of a major or minor in that content area.
  - Secondary Education Licensure Program
  - Licensure Degree Requirements
- To complete this teaching track, you need to contact the Teaching and Learning Department. You do not fill out a major/minor form for graduation or the major/minor/concentration section of the major change form. Approvals for this track must come from the Teaching and Learning Department.
- Tracks will not appear on your UM transcript, diploma, university lists, student data system, or university publications. They are used for advising purposes only. You do not fill out a major change for a track.

Teaching Art Track Requirements

Note: ARTZ 402 must be taken prior to ARTZ 403.

CODE	TITLE	HOURS
Complete all of the following courses:		
ARTZ 402	Teaching Art I-- K-12	3
ARTZ 403	Teaching Art II-- K-12	3
DANC 497	Methods: Tchng Movmnt in Schls	2
or THTR 239A	Creative Drama/Dance: K-8	
Total Hours		8

Course List

Minimum Required Grade: C

Secondary Teaching Licensure

Note: For endorsement to teach Art, a student also must gain admission to the Teacher Education Program and meet all the requirements for secondary teaching licensure. For more information, see the Teaching and Learning Department.

Art B.A. (Online Delivery) < University of Montana

Art B.A. (Online Delivery)

Bachelor of Arts - Art

College of Arts and Media

Degree Specific Credits: 57

Required Cumulative GPA: 3.0

Catalog Year: 2019-2020

Note: The completion of these requirements results in the same degree found here: a Bachelor of Arts with a major in Art. However, the requirements are modified to fit the online delivery method. Please see an advisor School of Visual and Media Arts for more information.

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

CODE	TITLE	HOURS
Shared Foundation Requirements		21
Intermediate Studio Requirements		15
Intermediate Art History, Theory, and Criticism		3
Upper-Division Studio Requirement		9
Upper-Division Art History, Theory, and Criticism Requirement		6
Upper-Division Capstone		3
Art Education Licensure		
Total Hours		57

Course List

Shared Foundation Requirements

Note: All courses are required unless waived via departmental advanced placement policy.

CODE	TITLE	HOURS
Complete all of the following courses:		
ARTH 150H	Introduction to Art History	3
ARTH 161H	Topics in Art	3
ARTZ 105A	Visual Language - Drawing	3
GDSN 149A	Digital Imaging I	3
MART 101L	Intro to Media Arts	3
MART 112A	Introduction to Film Editing	3
Complete one of the following courses:		
ARTZ 108A	Visual Language - 3-D Fndtns	3
or MART 120	Creative Coding I	
Total Hours		21

Course List

Minimum Required Grade: C

Intermediate Studio Requirements

Notes:

- 9 credits must be taken from the ARTZ and GDSN prefixes at the 200-level.
- The remaining 6 credits may be taken from the ARTZ and GDSN prefixes at the 200-level, and from MART at the 200- or 300-level.
- These courses fulfill the requirements of Thematic Area groups of Time, Digital, and Material.
- These courses should be chosen in consultation with your advisor.

CODE	TITLE	HOURS
Complete 15 credits in the following areas:		15
Art (ARTZ) at the 200-level		
Graphic Design (GDSN) at the 200-level		
Media Arts (MAR or MART) at the 200- or 300-level		
Total Hours		15

Course List

Minimum Required Grade: C

Intermediate Art History, Theory, and Criticism

Note: This course fulfills the requirements of Thematic Area group of History and Theory.

CODE	TITLE	HOURS
Complete a 200-level Art History (ARTH) course.		3
Total Hours		3

Course List

Minimum Required Grade: C

Upper-Division Studio Requirements

Note:

- 6 credits must be from the ARTZ or GDSN prefixes.
- The remaining 3 credits may be from the ARTZ, GDSN, or MART prefixes.
- These courses should be chosen in consultation with your advisor.

CODE	TITLE	HOURS
Complete 9 credits at the 300- and 400-levels from the following areas:		9
Art (ARTZ)		
Graphic Design (GDSN)		
Media Arts (MAR or MART)		
Total Hours		9

Course List

Minimum Required Grade: C

Upper-Division Art History, Theory, and Criticism Requirement

Notes:

- These courses should be chosen in consultation with your advisor.
- This course fulfills the requirement of Thematic Area group of History and Theory.

CODE	TITLE	HOURS
Complete one of the following:		6
Complete 6 credits in Art History (ARTH) at the 300- and 400-level.		
OR		
MART 450	Topics in Film/Media Studies	
AND		
Any 3 credit course in Art History (ARTH) at the 300- or 400-level		
Total Hours		6

Course List

Minimum Required Grade: C

Upper-Division Capstone

CODE	TITLE	HOURS
Complete the following course:		
ARTZ 495	Senior Studio Project	3
Total Hours		3

Course List

Minimum Required Grade: C

Art Education Licensure Requirements

Art Education licensure is earned by taking classes in both the School of Visual and Media Arts and the Phyllis J. Washington College of Education. 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.

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, ARTZ 403 as well as THTR 239A or DANC 497. In addition, students are required to take 35 credits of EDU classes and a Native American Studies Course. Please see the College of Education and Human Sciences for more details.

Teaching Art Track

Notes:

- This teaching track contains different/additional course requirements designed to meet state standards. Those interested in teaching in K-12 schools must complete the teaching track of a major in a teaching content area plus the Teacher Education Program through the Department of Teaching and Learning. Additional teaching areas can be added through completion of the teaching track of a major or minor in that content area.
  - Secondary Education Licensure Program
  - Licensure Degree Requirements
- To complete this teaching track, you need to contact the Teaching and Learning Department. You do not fill out a major/minor form for graduation or the major/minor/concentration section of the major change form. Approvals for this track must come from the Teaching and Learning Department.
- Tracks will not appear on your UM transcript, diploma, university lists, student data system, or university publications. They are used for advising purposes only. You do not fill out a major change for a track.

Teaching Art Track Requirements

Note: ARTZ 402 must be taken prior to ARTZ 403.

CODE	TITLE	HOURS
Complete all of the following courses:		
ARTZ 402	Teaching Art I-- K-12	3
ARTZ 403	Teaching Art II-- K-12	3
DANC 497	Methods: Tchng Movmnt in Schls	2
or THTR 239A	Creative Drama/Dance: K-8	
Total Hours		8

Course List

Minimum Required Grade: C

Secondary Teaching Licensure

Note: For endorsement to teach Art, a student also must gain admission to the Teacher Education Program and meet all the requirements for secondary teaching licensure. For more information, see the Teaching and Learning Department.

Art B.F.A. < University of Montana

Art B.F.A.

Bachelor of Fine Arts - Art

College of Arts and Media

Degree Specific Credits: 75

Required Cumulative GPA: 3.0

Catalog Year: 2019-2020

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

CODE	TITLE	HOURS
Shared Foundation Requirements		18
Intermediate Studio Requirements		15
Intermediate History, Theory, and Criticism		6
Upper-Division Studio Courses Outside of Area of Concentration		12
Upper-Division Studio Courses in Area of Concentration		12
Upper-Division Art History Requirement		3
Upper-Division Art Criticism Requirement		3
Senior Thesis Capstone		6
Art Education Licensure Track Requirements		
Total Hours		75

Course List

Shared Foundation Requirements

Note: All courses are required unless waived via departmental advanced placement policy.

CODE	TITLE	HOURS
Complete all of the following courses:		
ARTH 150H	Introduction to Art History	3
ARTZ 105A	Visual Language - Drawing	3
ARTZ 108A	Visual Language - 3-D Fndtns	3
GDSN 149A	Digital Imaging I	3
MART 101L	Intro to Media Arts	3
MART 112A	Introduction to Film Editing	3
Total Hours		18

Course List

Minimum Required Grade: C

Intermediate Studio Requirements

Notes:

- 9 credits must be taken from the ARTZ and GDSN prefixes at the 200-level.
- The remaining 6 credits may be taken from the ARTZ and GDSN prefixes at the 200-level, and from MART at the 200- or 300-level.
- These courses fulfill the requirements of Thematic Area groups of Time, Digital, and Material.
- Courses selected must include 3 credits of both 2D and 3D studio courses.

CODE	TITLE	HOURS
Complete 15 credits of courses in the following areas:		15
Art (ARTZ) at the 200-level		
Graphic Design (GDSN) at the 200-level		
Media Arts (MAR or MART) at the 200- or 300-level		
Total Hours		15

Course List

Minimum Required Grade: C

Intermediate Art History, Theory, and Criticism

Note: These courses fulfill requirements of Thematic Area group of History and Theory.

CODE	TITLE	HOURS
Complete all of the following courses:		
ARTH 201H	Art of World Civilization II	3
ARTH 250L	Introduction to Art Criticism	3
Total Hours		6

Course List

Minimum Required Grade: C

Upper-Division Studio Courses Outside of Area of Concentration

Note:

- 9 credits must be from the ARTZ or GDSN prefixes at the 300- and 400- level.
- The remaining 3 credits may be from the ARTZ, GDSN, or MART prefixes at the 300- and 400- level.
- These courses should be chosen in consultation with your advisor.

CODE	TITLE	HOURS
Complete 12 credits at the 300- and 400-levels from the following areas:		12
Art (ARTZ)		
Graphic Design (GDSN)		
Media Arts (MAR or MART)		
Total Hours		12

Course List

Minimum Required Grade: C

Upper-Division Studio Courses in Area of Concentration

Note:

- These courses should be in the same discipline to demonstrate an Area of Concentration. Consult with your advisor before selecting courses.
- A list of all ARTZ courses can be found here.

CODE	TITLE	HOURS
Complete 12 credits of the courses in Art (ARTZ) at the 300- or 400-level.		12
Total Hours		12

Course List

Minimum Required Grade: C

Upper-Division Art History Requirement

Notes:

- These courses should be chosen in consultation with your advisor.
- This course fulfills the requirement of Thematic Area group of History and Theory.

CODE	TITLE	HOURS
Complete 3 credits in Art History (ARTH) at the 300- and 400-level.		3
Total Hours		3

Course List

Minimum Required Grade: C

Upper-Division Art Criticism Requirement

Note: This course fulfills the requirement of Thematic Area group of History and Theory.

CODE	TITLE	HOURS
Complete the following course:		
ARTH 350	Contemp Art and Art Criticism	3
Total Hours		3

Course List

Minimum Required Grade: C

Senior Thesis Capstone

CODE	TITLE	HOURS
Complete all of the following courses:		
ARTZ 494	Seminar- Professional Practices	3
ARTZ 499	Senior Thesis/Capstone	3
Total Hours		6

Course List

Minimum Required Grade: C

Art Education Licensure Requirements

Art Education licensure is earned by taking classes in both the School of Visual and Media Arts and the Phyllis J. Washington College of Education. 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.

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, ARTZ 403 as well as THTR 239A or DANC 497. In addition, students are required to take 35 credits of EDU classes and a Native American Studies Course. Please see the College of Education and Human Sciences for more details.

Teaching Art Track

Notes:

- This teaching track contains different/additional course requirements designed to meet state standards. Those interested in teaching in K-12 schools must complete the teaching track of a major in a teaching content area plus the Teacher Education Program through the Department of Teaching and Learning. Additional teaching areas can be added through completion of the teaching track of a major or minor in that content area.
  - Secondary Education Licensure Program
  - Licensure Degree Requirements
- To complete this teaching track, you need to contact the Teaching and Learning Department. You do not fill out a major/minor form for graduation or the major/minor/concentration section of the major change form. Approvals for this track must come from the Teaching and Learning Department.
- Tracks will not appear on your UM transcript, diploma, university lists, student data system, or university publications. They are used for advising purposes only. You do not fill out a major change for a track.

Teaching Art Track Requirements

Note: ARTZ 402 must be taken prior to ARTZ 403.

CODE	TITLE	HOURS
Complete all of the following courses:		
ARTZ 402	Teaching Art I-- K-12	3
ARTZ 403	Teaching Art II-- K-12	3
DANC 497	Methods: Tchng Movmnt in Schls	2
or THTR 239A	Creative Drama/Dance: K-8	
Total Hours		8

Course List

Minimum Required Grade: C

Secondary Teaching Licensure

Note: For endorsement to teach Art, a student also must gain admission to the Teacher Education Program and meet all the requirements for secondary teaching licensure. For more information, see the Teaching and Learning Department.

Art History and Criticism Minor < University of Montana

Art History and Criticism Minor

Minor - Art History/Criticism

College of Arts and Media

Degree Specific Credits: 24

Required Cumulative GPA: 2.5

Catalog Year: 2019-2020

Note: This is a minor in Art History for those not majoring in Art.

Summary

CODE	TITLE	HOURS
Studio Art Fundamentals		12
Visual Language		
Beginning Art History		
Beginning Art Criticism		
Upper-Division Art History and Criticism		12
Total Hours		24

Course List

Studio Art Fundamentals

Rule: Complete the following subcategories. 12 total credits required.

Visual Language

CODE	TITLE	HOURS
Complete the following course:		
ARTZ 105A	Visual Language - Drawing	3
Total Hours		3

Course List

Minimum Required Grade: C

Beginning Art History

CODE	TITLE	HOURS
Complete all of the following courses:		
ARTH 200H	Art of World Civilization I	3
ARTH 201H	Art of World Civilization II	3
Total Hours		6

Course List

Minimum Required Grade: C

Beginning Art Criticism

CODE	TITLE	HOURS
Complete the following course:		
ARTH 250L	Introduction to Art Criticism	3
Total Hours		3

Course List

Minimum Required Grade: C

Upper-Division Art History and Criticism

CODE	TITLE	HOURS
Complete 12 credits of the following courses:		12
ARTH 333H	Architectural History I	
ARTH 350	Contemp Art and Art Criticism	
ARTH 391	Special Topics	
ARTH 407	Roman and Early Christian Art	
ARTH 425	Art of the Renaissance	
ARTH 433H	Ancient American Art	
ARTH 434	Latin American Art	
ARTH 436	The History of Women in Art	
ARTH 440	20th Century Art	
ARTH 450	Renaissance Theory & Criticism	
ARTH 458	Adv Research in Art History	
ARTH 459	Advanced Research Art Crit	
ARTH 464	African Art	
ARTH 465	Spanish Art	
ARTH 491	Special Topics	
ARTH 494	Sem Art Hist & Crit	
ARTH 498	Internship	
Total Hours		12

Course List

Minimum Required Grade: C

Art Studio Minor < University of Montana

Art Studio Minor

Minor - Art Studio

College of Arts and Media

Degree Specific Credits: 27

Required Cumulative GPA: 3.0

Catalog Year: 2019-2020

Summary

CODE	TITLE	HOURS
Studio Art Fundamentals		24
Visual Language		
Beginning Art History		
Studio I Courses		
Upper-Division Studio Course		3
Total Hours		27

Course List

Studio Art Fundamentals

Rule: Complete the following subcategories. 24 total credits required.

Visual Language

CODE	TITLE	HOURS
Complete all of the following courses:		
ARTZ 105A	Visual Language - Drawing	3
ARTZ 106A	Visual Language - 2-D Fndtns	3
ARTZ 108A	Visual Language - 3-D Fndtns	3
Total Hours		9

Course List

Minimum Required Grade: C

Beginning Art History

CODE	TITLE	HOURS
Complete all of the following courses:		
ARTH 200H	Art of World Civilization I	3
ARTH 201H	Art of World Civilization II	3
Total Hours		6

Course List

Minimum Required Grade: C+

Studio I Courses

CODE	TITLE	HOURS
Complete three of the following courses:		9
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	
Total Hours		9

Course List

Minimum Required Grade: C

Upper-Division Studio Course

CODE	TITLE	HOURS
Complete 3 credits of the following courses:		3
ARTZ 311	Drawing II	
ARTZ 321	Painting II	
ARTZ 331	Ceramics II	
ARTZ 335	Clay and Glaze	
ARTZ 351	Sculpture II	
ARTZ 371	Printmaking II	
ARTZ 385	The Art of Digital Photography	
ARTZ 388	Alternative Process Photog	
ARTZ 391	Special Topics	
ARTZ 398	Internship	
ARTZ 430	Advanced Research- Ceramics	
ARTZ 451	Advanced Research- Sculpture	
ARTZ 470	Advanced Research- Printmaking	
ARTZ 486	Advanced Research- Photography	
ARTZ 492	Independent Study	
ARTZ 498	Internship	
Total Hours		3

Course List

Minimum Required Grade: C

Art M.A.

- **Overview**

There are two areas of specialization for the M.A. in Art:

Master of Art (M.A.) in Art History

The MA in Art History focuses on research in the historical and cultural context of visual art. It prepares students for advanced graduate work at the Ph.D. level, and careers in art-related professions in museums, galleries, arts organizations and conservation departments.

Master of Art (M.A.) in Studio Art

This degree requires fewer credits than an M.F.A while still providing a graduate experience. While not designed for those wishing to pursue a professorship after school, it includes many of the crucial features of our graduate program.

Master of Art - Art

College of Arts and Media

Degree Specific Credits: 30

Required Cumulative GPA: 3.0

Catalog Year: 2019-2020

Degree Requirements - Art History

15 CREDITS: ART HISTORY AND CRITICISM (400-level or higher)

ARTH 400X or 500X Art History *(research paper included)*	3
ARTH 503 Critical Theories in Visual Art I	3
ARTH 509 Critical Theories in Visual Art II	3

16 CREDITS: ALLIED FIELDS & STUDIO ART (400-LEVEL OR HIGHER)

500X or higher (Allied Field)		3
500X or higher (Studio)		3

PEDAGOGY & PRE-CANDIDACY

ARTZ 504 Pre Candidacy		1
ARTZ 506 Pedagogy		3

THESIS WRITING & METHODOLOGIES

ARTH 699 Thesis Writing	3
ARTH 698 Methodologies in Art History	3
Comprehensive Exam	1

Degree Requirements - Studio Art

9 CREDITS: 6 CREDITS IN ART HISTORY AND THREE CREDITS IN CRITICAL THEORY

Graduate Level Art History		3
400 or Graduate Level Art History		3
ARTH 350 Art Criticism		3

12 CREDITS INDEPENDENT STUDIO RESEARCH

Independent Graduate Research	Variable

12 CREDITS: PEDAGOGY, PROFESSIONAL, OPEN ELECTIVES AND THESIS CREDITS

ARTZ 504 Pre Candidacy		1
400 Level Open Elective		3
ARTZ 699 Thesis Exhibition		2
ARTZ 697 Thesis Paper		1

Art M.F.A.

- Overview

At the core of our MFA program is a close one-on-one mentorship with professors, and regular critiques with fellow students. Students investigate ideas and process deeply, and develop their understanding through studio work, research, writing, presentation and critical analysis. Classes include:

- individual credits with professors,
- theory and criticism,
- professional development and college teaching
- critique colloquia, and thematic studio explorations.

Master of Fine Arts - Art

College of Arts and Media

Degree Specific Credits: 60

Required Cumulative GPA: 3.0

Catalog Year: 2019-2020

Degree Requirements

9 CREDITS: ART HISTORY AND CRITICAL THEORY

ARTH 503 Critical Theories in Visual Art I	3
400 or 500 UG Level Art History	3
ARTH 509 Critical Theories in Visual Art II	3

24-29 CREDITS INDEPENDENT STUDIO RESEARCH

ARTZ 505 - Independent Graduate Research	Variable

10-12 CREDITS: GRADUATE CRITIQUE SEMINARS

ARTZ 501 Graduate Critique Seminar	2

12-15 CREDITS: PEDAGOGY, PROFESSIONAL, OPEN ELECTIVE, EXPANDED STUDIO AND THESIS CREDITS

ARTZ 506 Pedagogy		3
ARTZ 504 Pre-Candidacy		1
ARTZ 507 Beyond Art School		2
400-500 Level Open Elective *(must be at least a UG 400 level course. Additional courses 500-level only)*		3-6
ARTZ 697 Thesis Paper		1
ARTZ 699 Thesis Exhibition		2

- Credits on the 400 level must have the UG designation, and are limited to six (6) credits at the 400-level.

Media Arts B.A. < University of Montana

Media Arts B.A.

- Overview
- Requirements

The School of Visual and Media Arts continues to lead the way in creating innovative educational experiences for students by offering the most comprehensive fully online Bachelor of Arts degree at the University of Montana. This degree enables students to maximize their creative potential through the study and artistic application of emerging digital technologies. It provides learning opportunities in interactive media, web and internet technologies, film editing, gaming, and a variety of digital design applications including sound, still image, motion, and animation. For more information on requirements, please see the B.A. program heading under academics or the Media Arts website.

Bachelor of Arts - Media Arts

College of Arts and Media

Degree Specific Credits: 57

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

CODE	TITLE	HOURS
Shared Foundation Requirements		18
Lower-Division Core		9
School of Visual and Media Arts Electives		9
Upper-Division Core		21
Total Hours		57

Course List

Shared Foundation Requirements

Note: All courses are required unless waived via departmental advanced placement policy.

CODE	TITLE	HOURS
Complete all of the following courses:		
ARTH 150H	Introduction to Art History	3
ARTZ 105A	Visual Language - Drawing	3
GDSN 149A	Digital Imaging I	3
MART 101L	Intro to Media Arts	3
MART 112A	Introduction to Film Editing	3
ARTZ 108A	Visual Language - 3-D Fndtns	3
or MART 120	Creative Coding I	
Total Hours		18

Course List

Minimum Required Grade: C

Lower-Division Core

Note: Courses could fulfill requirements of Thematic Area groups of Time, Digital, Material, and History and Theory.

CODE	TITLE	HOURS
Complete all of the following courses:		
MART 201H	Hist Digital Arts & Culture	3
MART 255	Photoshop: Art and Design	3
MART 256	Illustrator: Vector and Layout Design	3
Total Hours		9

Course List

Minimum Required Grade: C

School of Visual and Media Arts Electives

Notes:

- Courses could fulfill requirements of Thematic Area groups of Time, Digital, Material, and History and Theory.
- These courses should be chosen in consultation with your advisor.

CODE	TITLE	HOURS
Complete 9 credits of courses at the 200-level or above in the following areas:		9
Art History (ARTH)		
Art (ARTZ)		
Graphic Design (GDSN)		
Media Arts (MAR or MART)		
Total Hours		9

Course List

Minimum Required Grade: C

Upper-Division Core

CODE	TITLE	HOURS
Complete all of the following courses:		
MART 302	Intro to Motion Design	3
MART 330	Principles of Sound Design	3
MART 340	Princ of Interactive Media	3
MART 341	Intro to Web Design	3
MART 342	Art & Sci of Interactive Games	3
MART 441	Web Technologies	3
MART 450	Topics in Film/Media Studies	3
Total Hours		21

Course List

Minimum Required Grade: C

Media Arts B.F.A < University of Montana

Media Arts B.F.A

Bachelor of Fine Arts - Media Arts

College of Arts and Media

Degree Specific Credits: 75

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: The Shared Foundation sequence must be completed or be in the process of completion before acceptance into the B.F.A program.

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

CODE	TITLE	HOURS
Shared Foundations Requirements		18
General Core Courses		12
Advising Track Options		45
Digital Arts & Technology		
Digital Filmmaking		
Sonic Arts		
Total Hours		75

Course List

Shared Foundation Requirements

Note: All courses are required unless waived via the department advanced placement policy.

CODE	TITLE	HOURS
Complete all of the following courses:		
ARTH 150H	Introduction to Art History	3
ARTZ 105A	Visual Language - Drawing	3
GDSN 149A	Digital Imaging I	3
MART 101L	Intro to Media Arts	3
MART 112A	Introduction to Film Editing	3
Complete one of the following courses:		3
Note: B.F.A. students working towards the Sonic Arts or Digital Arts & Technology tracks are required to complete MART 120.		
ARTZ 108A	Visual Language - 3-D Fndtns	
MART 120	Creative Coding I	
Total Hours		18

Course List

Minimum Required Grade: C

General Core Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
MAR 210	Creation of Media Story	3
MART 330	Principles of Sound Design	3
MART 450	Topics in Film/Media Studies	3
MART 499	Senior Project	3
Total Hours		12

Course List

Minimum Required Grade: C

Advising Track Options

In addition to the above requirements, students must choose between one of three advising tracks, either Digital Arts & Technology, Digital Filmmaking, or Sonic Arts.

Note: These are advising tracks only and not official programs 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.

Digital Arts & Technology Track

Note: The Bachelor of Fine Arts Digital Arts & Technology track curriculum focuses on the artistic and creative application of digital technologies. Lower-division core classes cover the fundamentals of software applications such as the Adobe Creative Cloud Suite and include still image, motion, animation, and sound design components. They also include the fundamentals of creative coding. Upper-division core classes cover the principles and applications of web technologies (including HTML, CSS, and Javascript) and interactivity (including gaming, virtual reality, and installations). Senior-level core classes center on advanced projects and developing a portfolio-centered internet presence.

CODE	TITLE	HOURS
Complete all of the following courses:		
MAR 251	Dig Video Prod Tech	3
MART 201H	Hist Digital Arts & Culture	3
MART 220	Creative Coding II	3
MART 255	Photoshop: Art and Design	3
MART 256	Illustrator: Vector and Layout Design	3
MART 302	Intro to Motion Design	3
MART 305	3D Animation I	3
MART 325	Introduciton to Animation	3
MART 340	Princ of Interactive Media	3
MART 341	Intro to Web Design	3
MART 416	Production Studio I	3
MART 440	Tech Interactive Media Design	3
MART 441	Web Technologies	3
MART 445	Sound for Digital Media	3
MART 457	Production Studio II	3
Total Hours		45

Course List

Minimum Required Grade: C

Digital Filmmaking Track

Note: The Bachelor of Fine Arts Digital Filmmaking track offers an all-inclusive experience in the areas of pre-production, production, and post-production. Project-based courses cover narrative, experimental, documentary, and commercial content creation for both traditional and interactive-based environments.

CODE	TITLE	HOURS
Complete all of the following courses:		
MAR 251	Dig Video Prod Tech	3
MAR 252	Screenwriting	3
MAR 442	Experimental Film	3
MART 300	Visions of Film	3
MART 325	Introduciton to Animation	3
MART 327	Intro to Cinematography	3
MART 336	Directing the Fic Film	3
MART 340	Princ of Interactive Media	3
MART 345	Sound for Film	3
MART 436	Producing	3
MART 455	Visions of Documentary Film	3
MART 499	Senior Project (Both Senior Project and a Professional Portfolio are required)	3
Complete 9 elective credits of courses at the 200-level or above in the following areas:		9
Note: These courses should be chosen in consultation with your advisor.		
Art History (ARTH)		
Art (ARTZ)		
Graphic Design (GDSN)		
Media Arts (MAR or MART)		
Total Hours		45

Course List

Minimum Required Grade: C

Sonic Arts Track

Note: The Sonic Arts track 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 within the diverse world of art.

CODE	TITLE	HOURS
Complete all of the following courses:		
MART 220	Creative Coding II	3
MART 245	Introduction to the Language and Practice of Sonic Art	3
MART 340	Princ of Interactive Media	3
MART 345	Sound for Film	3
MART 420	Sonic Programming	3
MART 440	Tech Interactive Media Design	3
MART 445	Sound for Digital Media	3
MUST 110	Digital Audio & Multitracking	2
MUST 210	Sequencng, Synthesis, Sampling	2
MUST 310	Interactivity Digitl Sgnl Proc	2
MUST 410	Computer Music Programming	2
Complete 16 elective credits of courses at the 200-level or above in the following areas:		16
Note: These courses should be chosen in consultation with your advisor.		
Art History (ARTH)		
Art (ARTZ)		
Graphic Design (GDSN)		
Media Arts (MAR or MART)		
Total Hours		45

Course List

Minimum Required Grade: C

Media Arts Minor < University of Montana

Media Arts Minor

- Overview
- Requirements

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 the Media Arts website.

Minor - Media Arts

College of Arts and Media

Degree Specific Credits: 21

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Summary

CODE	TITLE	HOURS
Required Courses		12
Elective Courses		9
Total Hours		21

Course List

Required Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
MART 101L	Intro to Media Arts	3
MART 112A	Introduction to Film Editing	3
MART 102	Digital Technology in the Arts	3
MART 111A	Intro to Photoshop	3
Total Hours		12

Course List

Minimum Required Grade: C

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.

CODE	TITLE	HOURS
Complete 9 credits of the following courses:		9
ARTH 200H	Art of World Civilization I	
ARTH 201H	Art of World Civilization II	
ARTZ 105A	Visual Language - Drawing	
ARTZ 106A	Visual Language - 2-D Fndtns	
DANC 100A	Introduction to Modern Dance	
DANC 115A	Introduction to Jazz Dance	
MART 304	Modern Horror Film	
MART 191	Special Topics	
MART 255	Photoshop: Art and Design	
MART 256	Illustrator: Vector and Layout Design	
MART 341	Intro to Web Design	
MART 342	Art & Sci of Interactive Games	
MUSE 123	Techniques: Voice	
MUSI 101L	Enjoyment of Music	
MUSI 108A	Orchestra: UMSO	
MUSI 112A	Choir	
MUSI 114A	Band: UM Concert Band	
MUSI 131A	Jazz Ensemble I: UM Jazz Bands	
MUSI 132L	History of Rock & Roll	
MUSI 133L	Cntry Msc:Cowbys,Opry,Nshville	
MUSI 202L	Intro to Music Literature	
MUSI 207H	World Music (equiv to 307)	
MUSI 416	Topics in Music History	
MUST 110	Digital Audio & Multitracking	
THTR 102A	Introduction to Theatre Design	
THTR 120A	Introduction to Acting I	
THTR 121	Introduction to Acting II	
THTR 336	Costume History	
Total Hours		9

Course List

Minimum Required Grade: C

College of Business

Suzanne Tilleman, Interim Dean

Klaus Uhlenbruck, Associate Dean

The College of Business, 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, and accounting programs also hold separate AACSB accreditation.

Mission

The College of Business at the University of Montana creates transformative, integrated, and student-centric learning experiences, propelling our students to make immediate and sustained impacts on business and society. We nurture our students innate work ethic to develop confident problem solvers and ethical decision makers. We pursue thought leadership and collectively create opportunities for a better life for our students, faculty, and staff.

The goal of the College of Business's programs is to provide a broad foundation in business practice and theory, supplemented by deep expertise within one or more specific business disciplines through majors and certificates. The complexity of contemporary society has increased the need for responsible, ethical leadership in organizations with local and global reach. A professional business education combined with solid grounding in the liberal arts and sciences prepares men and women to meet difficult challenges and to contribute to society in meaningful ways. College of Business 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 & entrepreneurship,
- management information systems, and
- marketing.

Students pursuing other undergraduate degrees can complete a minor in Business Administration or various certificates.

High School Preparation

High school students who are planning to major or minor 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, analytical, 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 for traditional letter grade only.

All courses required for the major, the minor, 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 only if not identified as traditional letter grade in the registration system and if approved by the instructor and the department chair. For additional information see the Academic Policies and Procedures 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 Accountancy (M-Acct.),
- Master of Business Administration (M.B.A.),
- Master of Science in Business Analytics (M.S.-B.A.)
- Joint J.D./M.B.A.,
- Joint M.B.A./D.P.T. and
- Joint M.B.A./Pharm.D.

The M.B.A. M.S. - B.A. and M-Acct. programs are suited to all students regardless of undergraduate training. Students in the arts and sciences or other professional schools are encouraged to consider these graduate business programs. Further details may be obtained from the Graduate School or by specific inquiries directed to: Director of M.B.A. Program, College of Business, Director of M.S.-B. A. Program College of Business or Director of M-Acct. Program, College of Business.

Accounting and Finance Department < University of Montana

Accounting and Finance Department

- Overview
- Programs

Tony Crawford, Ph.D, CPA, 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.

Undergraduate

- Bachelor of Science in Business Administration - Accounting
- Bachelor of Science in Business Administration - Finance

Undergraduate Certificate

- Accounting Information Systems

Accounting B.S.

- Overview
- Requirements

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 College of Business hold separate AACSB International accreditation.

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

Bachelor of Science - Accounting

College of Business

Degree Specific Credits: 72-74

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note:

- At least 54 credits must be earned in Business classes (ECNS, COB internship courses and COB faculty-led study abroad courses maybe counted in OR out of Business"). A minimum GPA of 2.0 is required for these 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 27 credits in business, the capstone courses, AND all required 400-level accounting courses must be taken at UM.
- All Business credits transferred in after matriculating to UM must be pre-approved by the department chair in your major.

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

Course List		
CODE	**TITLE**	**HOURS**
College of Business Requirements		48-50
Primary Lower Core Courses		
Math Requirement		
Statistics Requirement		
Secondary Lower Core Courses		
Upper Major Core Courses		
Capstone and Upper-Division Writing Requirement		
Accounting Major Requirements		20
Accounting Major Electives		4
Total Hours		72-74

College of Business Requirements

Primary Lower Core Courses

Note: Unless a higher requirement is specified, all primary lower core courses must be completed with a C- or better and a 2.0 GPA in the seven (7) listed courses prior to admission into an upper-division Business Major. A minimum grade of C or better is required for ACTG 201 and ACTG 202 as a prerequisite for ACTG 305.

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
ACTG 201	Principles of Financial Accounting	3
ACTG 202	Principles of Managerial Accounting	3
BMIS 270	MIS Foundations for Business	3
ECNS 201S	Principles of Microeconomics	3
Total Hours		12

Minimum Required Grade: C-

Math Requirement

Note: The College of Business requires that credit be earned for one of the math courses below (with a C- or better) before enrolling in ACTG 202. A student's result on the ALEKS Math Placement Exam or Maplesoft Math Placement Exam does not waive this math requirement.

Course List		
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		3-4
M 115	Probability and Linear Mathematics	
M 121	College Algebra	
M 151	Precalculus	
M 162	Applied Calculus	
Total Hours		3-4

Minimum Required Grade: C-

Statistics Requirement

Note: This is a primary lower core course. The College of Business requires that credit be earned for STAT 216 (preferred) or one of the other statistics courses below (with a C- or better) prior to being admitted into an upper-division College of Business major.

Course List		
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		3-4
FORS 201	Forest Biometrics	
PSYX 222	Psychological Statistics	
SOCI 202	Social Statistics	
STAT 216	Introduction to Statistics (preferred)	
Total Hours		3-4

Minimum Required Grade: C-

Secondary Lower Core Courses

Note: All courses must be completed with a "C-" or better to satisfy prerequisites for certain major, upper major core, or capstone courses. Students are advised to complete these courses prior to being admitted to an upper-division Business Major. Prerequisites are strictly enforced.

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
BGEN 220E	Business Ethics and Social Responsibility (Students must complete this course with a C- or better prior to taking the capstone, though earlier completion is strongly encouraged.) Ethical & Human Values Requirement	3
COMX 111A	Introduction to Public Speaking (Students must complete this course with a C- or better prior to taking the capstone, though earlier completion is strongly encouraged.) Expressive Arts Requirement	3
CSCI 172	Intro to Computer Modeling	3
ECNS 202S	Principles of Macroeconomics Social Science Requirement	3
Total Hours		12

Minimum Required Grade: C-

Upper Major Core Courses

Note: All upper major core courses must be completed before the capstone can be taken. A student must be listed as a major or minor in business to take these courses. Major or minor in Business is defined as junior standing with all primary lower core courses completed, a 2.0 cumulative GPA, and formal admission to the major or minor.

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
BFIN 322	Business Finance	3
BGEN 361	Principles of Business Law	3
BMGT 322	Operations Management	3
BMGT 340	Management & Organization Behavior	3
BMKT 325	Principles of Marketing	3
Total Hours		15

Minimum Required Grade: C-

Capstone and Upper-Division Writing Requirement

Notes:

- Students must complete all primary and secondary lower core and upper core courses and their prerequisites and have an approved graduation application to register for their capstones.
- Students must pass the required comprehensive exam as well as all requisite coursework to earn a passing grade in BGEN 499.
- BGEN 499 must be taken at UM.
- This course also satisfies the UM and College of Business upper-division writing requirement.

Course List		
CODE	**TITLE**	**HOURS**
Complete the following course:		
BGEN 499	Strategic Management	3
Total Hours		3

Minimum Required Grade: C-

Accounting Major Requirements

Notes:

- No more than 30 credits of ACTG (including ACTG 201 and ACTG 202) may count towards the 120 credits required to graduate.
- All required 400-level accounting courses must be taken at UM.

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
ACTG 305	Corporate Reporting I (Grade of C is required)	3
ACTG 306	Corporate Reporting II	3
ACTG 321	Acct Information Systems I	3
ACTG 401	Federal Income Taxation	3
ACTG 410	Cost/Mgmt Acct I	3
ACTG 411	Auditing I	3
ACTG 425	State and Local Government Accounting	2
Total Hours		20

Minimum Required Grade: C-

Accounting Major Electives

Notes:

- No more than 4 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 List		
CODE	**TITLE**	**HOURS**
Complete four credits from the following courses:		4
ACTG 307	Corporate Reporting III	
ACTG 420	Cost/Mgmt Acct II	
ACTG 426	Acctg for Nonprofits	
ACTG 432	Income Tax Practicum	
ACTG 498	Internship	
Total Hours		4

Minimum Required Grade: C-

Finance B.S.

- Overview
- Requirements

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

College of Business

Degree Specific Credits: 72-74

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Notes:

- At least 54 credits must be earned in Business classes (ECNS, COB internship and COB faculty let study abroad courses may be counted in OR out of Business). A minimum GPA of 2.0 is required for these courses.
- At least 27 credits in business, the capstone course, AND all required 400-level finance courses must be taken at UM.
- All business credits transferred in after matriculating to UM must be pre-approved by the department chair in your major.

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

Course List		
CODE	**TITLE**	**HOURS**
College of Business Requirements		48-50
Primary Lower Core Courses		
Math Requirement		
Statistics Requirement		
Secondary Lower Core Courses		
Upper Major Core Courses		
Capstone and Upper-Division Writing Requirement		
Finance Major Requirements		15
Finance Major Electives		9
Total Hours		72-74

College of Business Requirements

Primary Lower Core Courses

Note: Unless a higher grade requirement is specified, all primary lower core courses must be completed with a C- or better and a 2.0 GPA must be earned in the seven (7) listed courses prior to admission into an upper-division Business Major.

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
ACTG 201	Principles of Financial Accounting	3
ACTG 202	Principles of Managerial Accounting	3
BMIS 270	MIS Foundations for Business	3
ECNS 201S	Principles of Microeconomics	3
Total Hours		12

Minimum Required Grade: C-

Math Requirement

Notes:

- The Finance Department encourages that a student take M 162 to complete the math requirement to better prepare for a major in Finance. However, M 115, M 121, or M 151 will be accepted for students who choose not to take M 162.
- The College of Business requires that credit be earned for one of the math courses below (with a C- or better) before enrolling in ACTG 202.
- A student's score on the ALEKS Math Placement Exam or the Maplesoft Math Placement Exam does not waive this math requirement.

Course List		
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		3-4
M 115	Probability and Linear Mathematics	
M 121	College Algebra	
M 151	Precalculus	
M 162	Applied Calculus	
Total Hours		3-4

Minimum Required Grade: C-

Statistics Requirement

Note: This is a primary lower core course. The College of Business requires that credit be earned for STAT 216 (preferred) or one of the other statistics courses below (with a C- or better) prior to being admitted into an upper-division College of Business major.

Course List		
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		3-4
FORS 201	Forest Biometrics	
PSYX 222	Psychological Statistics	
SOCI 202	Social Statistics	
STAT 216	Introduction to Statistics (preferred)	
Total Hours		3-4

Minimum Required Grade: C-

Secondary Lower Core Courses

Note: All courses must be completed with a "C-" or better to satisfy prerequisites for certain major, upper major core, or capstone courses. Students are advised to complete these courses prior to being admitted to an upper-division Business Major. Prerequisites are strictly enforced.

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
BGEN 220E	Business Ethics and Social Responsibility (Students must complete this course with a C- or better prior to taking the capstone, though earlier completion is strongly encouraged.) Ethical & Human Values Requirement	3
COMX 111A	Introduction to Public Speaking (Students must complete this course with a C- or better prior to taking the capstone, though earlier completion is strongly encouraged.) Expressive Arts Requirement	3
CSCI 172	Intro to Computer Modeling	3
ECNS 202S	Principles of Macroeconomics Social Science Requirement	3
Total Hours		12

Minimum Required Grade: C-

Upper Major Core Courses

Note:

- BFIN 322 must be completed with a C or higher as a prerequisite to the finance major requirements.
- All upper major core courses must be completed before the capstones can be taken. A student must be listed as a major or minor in business to take these courses. Major or minor in business is defined as junior standing with all primary lower core courses completed, a 2.0 cumulative GPA, and formally admitted to the major or minor.

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
BFIN 322	Business Finance	3
BGEN 361	Principles of Business Law	3
BMGT 322	Operations Management	3
BMGT 340	Management & Organization Behavior	3
BMKT 325	Principles of Marketing	3
Total Hours		15

Minimum Required Grade: C-

Capstone and Upper-Division Writing Requirement

Notes:

- Students must complete all primary and secondary lower core and upper core courses and their prerequisites and have an approved graduation application to register for their capstones.
- Students must pass the required comprehensive exam as well as all requisite coursework to earn a passing grade in STAT 216.
- must be taken at UM.
- This course also satisfies the UM and College of Business upper-division writing requirement.

Course List		
CODE	**TITLE**	**HOURS**
Complete the following course:		
BGEN 499	Strategic Management	3
Total Hours		3

Minimum Required Grade: C-

Finance Major Requirements

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

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
BFIN 420	Investments	3
BFIN 424	Markets, Instns & Fin Enginrng	3
BFIN 429	Fin Mgmt I:Thry/Analysis	3
BFIN 439	Fin Mgmt II: Analysis/Problems	3
BFIN 450	Banking	3
Total Hours		15

Minimum Required Grade: C-

Finance Major Electives

Note:

- BFIN 205S is encouraged for Finance majors, but does not count as an elective for the Finance Major.
- These 9 credits are selected in consultation with your faculty advisor. A signed track sheet reflecting these courses is required on file in the College of Business Advising Office.
- Up to 3 credits of BFIN 498 can count towards the 9 credit elective requirement.

		Course List
CODE	**TITLE**	**HOURS**
Complete 9 credits from the following courses:		9
ACTG 305	Corporate Reporting I	
ACTG 321	Acct Information Systems I	
ACTG 410	Cost/Mgmt Acct I	
BFIN 301	Analysis of Finan Statements	
BFIN 410	$50,000 Portfolio	
BFIN 421	Real Estate Invtmnt & Analysis	
BFIN 473	Multinational Financial Mgmt	
BFIN 498	Internship	
BMIS 326	Introduction to Data Analytics	
BMIS 479	Introduction to Consulting	
ECNS 301	Intermediate Micro with Calc	
ECNS 302	Intermediate Macroeconomics	
ECNS 403	Introduction to Econometrics	
Total Hours		9

Minimum Required Grade: C-

Accounting Information Systems Certificate < University of Montana

Accounting Information Systems Certificate

Post-Secondary Certificate - Accounting Information Systems

College of Business

Degree Specific Credits: 24

Required Cumulative GPA: 3.0

Catalog Year: 2019-2020

Notes:

- 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 24 credits listed below, not a student s cumulative GPA.
- Please meet with an AIS Certificate Advisor for assistance (see COB Advising for list of advisors by major).

Summary

CODE	TITLE	HOURS
Accounting Information Systems Certificate Requirements		21
Accounting Information Systems Certificate Electives		3
Total Hours		24

Course List

Accounting Information Systems Certificate Requirements

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

CODE	TITLE	HOURS
Complete all of the following courses:		
ACTG 305	Corporate Reporting I	3
ACTG 306	Corporate Reporting II	3
ACTG 321	Acct Information Systems I	3
ACTG 411	Auditing I	3
BMIS 326	Introduction to Data Analytics	3
BMIS 373	Business System Analy & Design	3
BMIS 479	Introduction to Consulting	3
Total Hours		21

Course List

Minimum Required Grade: C-

Accounting Information Systems Certificate Electives

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

CODE	TITLE	HOURS
Complete 3 credits of the following courses:		3
BMIS 365	Business App Development	
BMIS 370	Managing Information and Data	
Total Hours		3

Course List

Minimum Required Grade: C-

Management Information Systems Department < University of Montana

Management Information Systems Department

- Overview
- Programs

Clayton A. Looney, 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 STEM curriculum prepares students to manage an organization s information resources. The major focuses on:

1. analyzing and synthesizing information flows within and across the organization s business processes;
2. effectively managing the acquisition, deployment, and utilization of information systems; 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 data analytics, cybersecurity, consulting, application development, infrastructure management, systems analysis, technology and design, electronic commerce, and project management.

Certificate in Big Data Analytics

The Big Data Analytics (BDA) certificate is designed to provide students with the tools necessary to compete in the Big Data space. Students will use big data tools that are currently available to capture, analyze, and present big data. They will explore a variety of applications with which Big Data tools can be applied, and they will complete a Big Data project. This certificate is currently aimed at students majoring in business, computer science, or mathematics.

Undergraduate

- Management Information Systems B.S.

Undergraduate Minors

- Business Administration Minor

Undergraduate Certificates

- Certificate in Big Data Analytics

University Of Montana

Management Information Systems B.S.

Bachelor of Science - Management Information Systems

College of Business

Degree Specific Credits: 72-74

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Notes:

- At least 54 credits must be earned in Business classes (ECNS, COB internship courses and College of Business faculty-led study abroad course may be counted in OR out of Business). A minimum GPA of 2.0 is required for these courses.
- At least 27 credits in business AND BMIS 476 must be taken at UM.
- All business credits transferred in after matriculating to UM must be pre-approved by the department chair in your major.

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

Course List		
CODE	**TITLE**	**HOURS**
College of Business Requirements		48-50
Primary Lower Core Courses		
Math Requirement		
Statistics Requirement		
Secondary Lower Core Courses		
Upper Major Core Courses		
Capstone Course and Upper-Division Writing Requirement		
Management Information Systems Requirements		18
Management Information Systems Electives		6
Total Hours		72-74

College of Business Requirements

Primary Lower Core Courses

Note: All primary lower core courses must be completed with a C- or better and a 2.0 GPA must be earned in the seven (7) listed course prior to admission into an upper-division Business Major.

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
ACTG 201	Principles of Financial Accounting	3
ACTG 202	Principles of Managerial Accounting	3
BMIS 270	MIS Foundations for Business	3
ECNS 201S	Principles of Microeconomics	3
Total Hours		12

Minimum Required Grade: C-

Math Requirement

Notes:

- The College of Business requires that credit be earned for one of the math courses below (with a C- or better) before enrolling in ACTG 202.
- A student's result on the ALEKS or Maplesoft Math Placement Exam does not waive this requirement.

Course List		
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		3-4
M 115	Probability and Linear Mathematics	
M 121	College Algebra	
M 151	Precalculus	
M 162	Applied Calculus	
Total Hours		3-4

Minimum Required Grade: C-

Statistics Requirement

Note: This is a primary lower core course. The College of Business requires that credit be earned for STAT 216 (preferred) or one of the other statistics courses below (with a C- or better) prior to being admitted into an upper-division College of Business major.

Course List		
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		3-4
FORS 201	Forest Biometrics	
PSYX 222	Psychological Statistics	
SOCI 202	Social Statistics	
STAT 216	Introduction to Statistics (preferred)	
Total Hours		3-4

Minimum Required Grade: C-

Secondary Lower Core Courses

Note: All courses must be completed with a "C-" or better to satisfy prerequisites for certain major, upper major core, or capstone courses. Students are advised to complete these courses prior to being admitted to an upper-division Business Major. Prerequisites are strictly enforced.

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
BGEN 220E	Business Ethics and Social Responsibility (Students must complete this course with a C- or better prior to taking the capstone, though earlier completion is strongly encouraged.) Ethical & Human Values Requirement	3
COMX 111A	Introduction to Public Speaking (Students must complete this course with a C- or better prior to taking the capstone, though earlier completion is strongly encouraged.) Expressive Arts Requirement	3
CSCI 172	Intro to Computer Modeling	3
ECNS 202S	Principles of Macroeconomics Social Science Requirement	3
Total Hours		12

Minimum Required Grade: C-

Upper Major Core Courses

Notes:

- All upper major core courses must be completed before the capstone can be taken.
- A student must be listed as a major in Business to take these courses. Major or minor in Business is defined as junior standing with all primary lower core courses completed, a 2.0 cumulative GPA, and formally admitted to the major or minor.

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
BFIN 322	Business Finance	3
BGEN 361	Principles of Business Law	3
BMGT 322	Operations Management	3
BMGT 340	Management & Organization Behavior	3
BMKT 325	Principles of Marketing	3
Total Hours		15

Minimum Required Grade: C-

Capstone and Upper-Division Writing Requirement

Notes:

- Students must complete all primary and secondary lower core and upper core courses and their prerequisites and have an approved graduation application to register for their capstones.
- Students must pass the required comprehensive exam as well as all requisite coursework to earn a passing grade in BGEN 499.
- BGEN 499 must be taken at UM.
- This course also satisfies the UM and College of Business upper-division writing requirement.

Course List		
CODE	**TITLE**	**HOURS**
Complete the following course:		
BGEN 499	Strategic Management	3
Total Hours		3

Minimum Required Grade: C-

Management Information Systems Requirements

Notes:

- BMIS 365 and BMIS 476 must be taken at UM.
- 3 credits of BMIS 498 are required to graduate.

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
BMIS 326	Introduction to Data Analytics	3
BMIS 365	Business App Development	3
BMIS 372	Information Infrastructures	3
BMIS 373	Business System Analy & Design	3
BMIS 476	Integrated Project Mgmt for IS	3
BMIS 498	Internship	3
Total Hours		18

Minimum Required Grade: C-

Management Information Systems Electives

		Course List
CODE	**TITLE**	**HOURS**
Complete 6 credits from the following courses:		6
ACTG 321	Acct Information Systems I	
BMGT 467	Global Operations and Supply Chain Management	
BMIS 370	Managing Information and Data	
BMIS 391	Special Topics	
BMIS 465	Introduction to Real-time Data Analytics	
BMIS 471	Fund of Network & Security Management	
BMIS 472	Advanced Network & Security Management	
BMIS 478	E Commerce a Managerl Prspctv	
BMIS 479	Introduction to Consulting	
BMIS 491	Special Topics	
BMIS 492	Independent Study	
BMKT 460	Mktg Hi-Tech Prod & Innov	
CSCI 135	Fund of Computer Science I	
CSCI 136	Fund of Computer Science II	
CSCI 448	Pattern Recognition	
CSCI 464	Applications of Mining Big Data	
M 461	Data Science Analytics	
STAT 451	Statistical Methods I	
Total Hours		6

Minimum Required Grade: C-

Big Data Analytics Certificate < University of Montana

Big Data Analytics Certificate

- Overview
- Requirements

The Big Data Analytics (BDA) certificate is designed to provide students with the tools necessary to compete in the Big Data space. Students will use big data tools that are currently available to capture, analyze, and present big data. They will explore a variety of applications with which Big Data tools can be applied, and they will complete a Big Data project. This certificate is currently aimed at students majoring in business, computer science, or mathematics.

Post-secondary Certificate - Big Data Analytics

College of Business

Degree Specific Credits: 12

Required Cumulative GPA: 3.0

Catalog Year: 2019-2020

Notes:

- All students pursuing a Big Data Analytics C
- The 3.0 GPA requirement pertains specifica
- Please meet with a Big Data Analytics Certif
  all others contact COB Advising).
- Complete the Big Data Analytics certificate

Minimum Required Grade: C-

Big Data Analytics Certificate Elective Courses

CODE	TITLE
Complete six credits from the following courses:	
BMIS 465	Introduction to Real-time Data Analytics
BMKT 440	Marketing Analytics
CSCI 444	Data Visualization
CSCI 447	Machine Learning
CSCI 448	Pattern Recognition
CSCI 464	Applications of Mining Big Data
CSCI 480	Applied Parallel Computing Techniques
CSCI 564	Applications of Mining Big Data
CSCI 580	Applied Parallel Computing Techniques
M 461	Data Science Analytics
M 462	Theoretical Basics of Big Data Analytics and Real Time Computation Algorithms
Total Hours	

Course List

Minimum Required Grade: C-

Big Data Analytics Certificate Capstone Course

CODE	TITLE	HOURS
Complete one of the following courses:		
BMIS 482	Big Data Project	3
or M 467	Data Science Projects	
Total Hours		3

Course List

Minimum Required Grade: C-

Business Administration Minor < University of Montana

Business Administration Minor

Minor - Business Administration

College of Business

Degree Specific Credits: 28

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Summary

CODE	TITLE	HOURS
Primary Lower Core Courses		16
Upper Minor Core		12
Total Hours		28

Course List

Primary Lower Core Courses

Notes:

- Students must earn a "C-" or better in any prerequisites and primary lower core courses before taking the upper division business minor courses. These seven (7) courses must be completed with a 2.0 GPA.
- Student can apply to the Business Minor when they have a "C-" or better in all primary lower core courses, 60 credits, and a 2.0 primary lower core GPA.

CODE	TITLE	HOURS
Complete all of the following courses:		
ACTG 201	Principles of Financial Accounting	3
ACTG 202	Principles of Managerial Accounting	3
BMIS 270	MIS Foundations for Business	3
ECNS 201S	Principles of Microeconomics	3
STAT 216	Introduction to Statistics	4
or SOCI 202	Social Statistics	
or PSYX 222	Psychological Statistics	
or FORS 201	Forest Biometrics	
Total Hours		16

Course List

Minimum Required Grade: C-

Upper Minor Core

Notes:

- Three of the four upper minor core classes must be completed at the University of Montana - Missoula.
- These classes can only be taken after the application to the Business Minor has been approved.

CODE	TITLE	HOURS
Complete all of the following courses:		
BFIN 322	Business Finance	3
BGEN 361	Principles of Business Law	3
BMGT 340	Management & Organization Behavior	3
BMKT 325	Principles of Marketing	3
Total Hours		12

Course List

Minimum Required Grade: C-

Cybersecurity Management Certificate < University of Montana

Cybersecurity Management Certificate

- Overview
- Requirements

The Cybersecurity Management Certificate is designed to provide students with the technical and management skills necessary to work in the Cybersecurity field. Students will use Cybersecurity skills as a consultant or as an employee helping an organization to develop and implement a Cybersecurity program or respond to security incidents. Students will explore a variety of knowledge areas of Cybersecurity Management and apply that knowledge in a project in the capstone course. The curriculum is based on the Core Knowledge Units developed by the National Security Agency (NSA) and the Department of Homeland Security (DHS). Students will gain skills in programming; networking technology & protocols; databases & analytics; probability & statistics; policy, legal, ethics, and compliance; cybersecurity fundamentals & practices, and cybersecurity management & planning.

Post-secondary Certificate - Cybersecurity Management

College of Business

Degree Specific Credits: 18

Required Cumulative GPA: 3.0

Catalog Year: 2019-2020

Notes:

Minimum Required Grade: C-

Programming & Scripting Knowledge Pathway

CODE	TITLE
Complete one of the following courses:	
BMIS 365	Business App Development
BMIS 465	Introduction to Real-time Data Analytics
Total Hours	

Course List

Minimum Required Grade: C-

Databases, Analytics, & Statistics Knowledge Pathway

CODE	TITLE	HOURS
Complete one of the following courses:		3
BMIS 326	Introduction to Data Analytics	
BMIS 370	Managing Information and Data	
Total Hours		3

Course List

Minimum Required Grade: C-

Policy, Legal, Ethics, & Compliance Knowledge Pathway

CODE	TITLE	HOURS
Complete one of the following courses:		3
ACTG 321	Acct Information Systems I	
BGEN 220E	Business Ethics and Social Responsibility	
BGEN 361	Principles of Business Law	
Total Hours		3

Course List

Minimum Required Grade: C-

Cybersecurity Management & Planning Knowledge Pathway

CODE	TITLE	HOURS
Complete one of the following courses:		3
BMIS 476	Integrated Project Mgmt for IS	
BMIS 478	E Commerce a Managerl Prspctv	
BMIS 479	Introduction to Consulting	
BMIS 482	Big Data Project	
Total Hours		3

Course List

Minimum Required Grade: C-

Capstone Course: Cybersecurity Fundamentals & Practices Knowledge Pathway

CODE	TITLE	HOURS
Complete the following course:		
BMIS 472	Advanced Network & Security Management	3
Total Hours		3

Course List

Minimum Required Grade: C-

Management and Marketing Department < University of Montana

Management and Marketing Department

- Overview
- Programs

Suzanne Tilleman, Chair

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

Undergraduate

- International Business B.S.
- Management and Entrepreneurship B.S.
- Marketing B.S.

Undergraduate Certificates

- Digital Marketing Certification
- Entertainment Management Certificate
- Entrepreneurship and New Venture Creation Certificate
- Sustainable Business Strategy

University Of Montana

International Business B.S.

Bachelor of Science - International Business

College of Business

Degree Specific Credits: 70-84

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note:

- At least 54 credits must be earned in Business classes (ECNS, COB internship courses and COB faculty-led study abroad courses may be counted in OR out of Business). A minimum GPA of 2.0 is required for these courses.
- At least 27 credits in business must be taken at UM.
- All business credits transferred in after matriculating to UM must be pre-approved by the department chair in your major.
- 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.

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

Course List		
CODE	**TITLE**	**HOURS**
College of Business Requirements		48-50
Primary Lower Core Courses		
Math Requirement		
Statistics Requirement		
Secondary Lower Core Courses		
Upper Major Core Courses		
Capstone and Upper-Division Writing Requirement		
International Business Major Requirements		12
International Business Language Requirement		4-16
International Business Major Electives		6
Total Hours		70-84

College of Business Requirements

Primary Lower Core Courses

Note: Unless a higher requirement is specified, all primary lower core courses must be completed with a C- or better and a 2.0 GPA in the seven (7) listed courses prior to admission into an upper-division Business Major. A minimum grade of C or better is required for ACTG 201 and ACTG 202 as a prerequisite for ACTG 305.

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
ACTG 201	Principles of Financial Accounting	3
ACTG 202	Principles of Managerial Accounting	3
BMIS 270	MIS Foundations for Business	3
ECNS 201S	Principles of Microeconomics	3
Total Hours		12

Minimum Required Grade: C-

Math Requirement

Note: The College of Business requires that credit be earned for one of the math courses below (with a C- or better) before enrolling in ACTG 202. A student's result on the ALEKS Math Placement Exam or Maplesoft Math Placement Exam does not waive this math requirement.

Course List		
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		3-4
M 115	Probability and Linear Mathematics	
M 121	College Algebra	
M 151	Precalculus	
M 162	Applied Calculus	
Total Hours		3-4

Minimum Required Grade: C-

Statistics Requirement

Note: This is a primary lower core course. The College of Business requires that credit be earned for STAT 216 (preferred) or one of the other statistics courses below (with a C- or better) prior to being admitted into an upper-division College of Business major.

Course List		
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		3-4
FORS 201	Forest Biometrics	
PSYX 222	Psychological Statistics	
SOCI 202	Social Statistics	
STAT 216	Introduction to Statistics (preferred)	
Total Hours		3-4

Minimum Required Grade: C-

Secondary Lower Core Courses

Note: All courses must be completed with a "C-" or better to satisfy prerequisites for certain major, upper major core, or capstone courses. Students are advised to complete these courses prior to being admitted to an upper-division Business Major. Prerequisites are strictly enforced.

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
BGEN 220E	Business Ethics and Social Responsibility (Students must complete this course with a C- or better prior to taking the capstone, though earlier completion is strongly encouraged.) Ethical & Human Values Requirement	3
COMX 111A	Introduction to Public Speaking (Students must complete this course with a C- or better prior to taking the capstone, though earlier completion is strongly encouraged.) Expressive Arts Requirement	3
CSCI 172	Intro to Computer Modeling	3
ECNS 202S	Principles of Macroeconomics Social Science Requirement	3
Total Hours		12

Minimum Required Grade: C-

Upper Major Core Courses

Note: All upper major core courses must be completed before the capstone can be taken. A student must be listed as a major or minor in business to take these courses. Major or minor in Business is defined as junior standing with all primary lower core courses completed, a 2.0 cumulative GPA, and formal admission to the major or minor.

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
BFIN 322	Business Finance	3
BGEN 361	Principles of Business Law	3
BMGT 322	Operations Management	3
BMGT 340	Management & Organization Behavior	3
BMKT 325	Principles of Marketing	3
Total Hours		15

Minimum Required Grade: C-

Capstone and Upper-Division Writing Requirement

Notes:

- Students must complete all primary and secondary lower core and upper core courses and their prerequisites and have an approved graduation application to register for their capstones.
- Students must pass the required comprehensive exam as well as all requisite coursework to earn a passing grade in BGEN 499.
- BGEN 499 must be taken at UM.
- This course also satisfies the UM and College of Business upper-division writing requirement.

Course List		
CODE	**TITLE**	**HOURS**
Complete the following course:		
BGEN 499	Strategic Management	3
Total Hours		3

Minimum Required Grade: C-

International Business Major Requirements

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
BFIN 473	Multinational Financial Mgmt	3
BGEN 360	International Business	3
BMGT 467	Global Operations and Supply Chain Management	3
BMGT 480	Cross-Cultural Mgmt	3
Total Hours		12

Minimum Required Grade: C-

International Business Major Language Requirement

Note: A student may be exempt from this requirement if using English as a second language or another language not offered by the University of Montana. Please see the International Business advisor for assistance.

Course List		
CODE	**TITLE**	**HOURS**
Complete the 202 level or equivalent in a modern or classical language.		4-16
Total Hours		4-16

Minimum Required Grade: C-

International Business Major Electives

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 College of Business Advising Office.

Course List		
CODE	**TITLE**	**HOURS**
Complete 6 credits in courses approved by your advisor.		6
Total Hours		6

Minimum Required Grade: C-

University Of Montana

Management & Entrepreneurship B.S.

Bachelor of Science - Management & Entrepreneurship

College of Business

Degree Specific Credits: 72-74

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Notes:

- At least 54 credits must be earned in Business classes (ECNS, College of Business internship courses, and College of Business faculty-led study abroad courses may be counted in OR out of Business). A minimum GPA of 2.0 is required in these courses.
- At least 27 credits in business courses must be taken at UM.
- All business credits transferred in after matriculating to UM must be pre-approved by the department chair in your major.

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

Course List		
CODE	**TITLE**	**HOURS**
College of Business Requirements		48-50
Primary Lower Core Courses		
Math Requirement		
Statistics Requirement		
Secondary Lower Core Courses		
Upper Major Core Courses		
Capstone Course and Upper-Division Writing Requirement		
Management Major Requirements		12
Management Major Electives		12
Total Hours		72-74

College of Business Requirements

Lower Primary Core Courses

Note: All lower primary core courses must be completed with a C- or better and a 2.0 GPA must per earned in the seven (7) listed courses prior to admission into an upper-division Business Major

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
ACTG 201	Principles of Financial Accounting	3
ACTG 202	Principles of Managerial Accounting	3
BMIS 270	MIS Foundations for Business	3
ECNS 201S	Principles of Microeconomics	3
Total Hours		12

Minimum Required Grade: C-

Math Requirement

Notes:

- The College of Business requires that credit be earned for one of the math courses below (with a C- or better) before enrolling in ACTG 202.
- A student's result on the ALEKS Math Placement Exam or the Maplesoft Math Placement Exam does not waive the math requirement.

Course List		
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		3-4
M 115	Probability and Linear Mathematics	
M 121	College Algebra	
M 151	Precalculus	
M 162	Applied Calculus	
Total Hours		3-4

Minimum Required Grade: C-

Statistics Requirement

Note: This is a lower primary core. The College of Business requires that credit be earned for STAT 216 (preferred) or one of the other statistics courses below (with a C- or better) prior to being admitted into an upper-division College of Business major.

Course List		
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		3-4
FORS 201	Forest Biometrics	
PSYX 222	Psychological Statistics	
SOCI 202	Social Statistics	
STAT 216	Introduction to Statistics (preferred)	
Total Hours		3-4

Minimum Required Grade: C-

Secondary Lower Core Courses

Note: All courses must be completed with a "C-" or better to satisfy prerequisites for certain major, upper major core, or capstone courses. Students are advised to complete these courses prior to being admitted to an upper-division Business Major. Prerequisites are strictly enforced.

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
BGEN 220E	Business Ethics and Social Responsibility (Students must complete this course with a C- or better prior to taking the capstone, though earlier completion is strongly encouraged.) Ethical & Human Values Requirement	3
COMX 111A	Introduction to Public Speaking (Students must complete this course with a C- or better prior to taking the capstone, though earlier completion is strongly encouraged.) Expressive Arts Requirement	3
CSCI 172	Intro to Computer Modeling	3
ECNS 202S	Principles of Macroeconomics Social Science Requirement	3
Total Hours		12

Minimum Required Grade: C-

Upper Major Core Courses

Notes:

- All upper major-core courses must be completed before the capstones can be taken.
- Students should take BMGT 340 in the first semester in the upper-division major as it is a prerequisite course for many Management Major courses.
- A student must be listed as a major or minor in business to take these courses. Major or minor in business is defined as junior standing with all primary lower core courses completed, a 2.0 cumulative GPA, and formally admitted to the major or minor.

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
BFIN 322	Business Finance	3
BGEN 361	Principles of Business Law	3
BMGT 322	Operations Management	3
BMGT 340	Management & Organization Behavior	3
BMKT 325	Principles of Marketing	3
Total Hours		15

Minimum Required Grade: C-

Capstone and Upper-Division Writing Requirement

Notes:

- Students must complete all primary and secondary lower core and upper core courses and their prerequisites and have an approved graduation application to register for their capstones.
- Students must pass the required comprehensive exam as well as all requisite coursework to earn a passing grade in BGEN 499.
- BGEN 499 must be taken at UM.

- This course also satisfies the UM and College of Business upper-division writing requirement.

Course List		
CODE	**TITLE**	**HOURS**
Complete the following course:		
BGEN 499	Strategic Management	3
Total Hours		3

Minimum Required Grade: C-

Management Major Requirements

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
BGEN 360	International Business	3
BMGT 420	Leadership and Motivation	3
BMGT 444	Management Communications	3
BMGT 448	Entrepreneurship	3
Total Hours		12

Minimum Required Grade: C-

Management Major Electives

Notes:

- Up to 4 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 List		
CODE	**TITLE**	**HOURS**
Complete 12 credits from the following courses:		12
BGEN 445	Sustainability Reporting	
BMGT 401	Event Management	
BMGT 402	Prin of Entertainment Mgmt I	
BMGT 403	Prin of Entertainment Mgmt II	
BMGT 410	Sustainable Business Practices	
BMGT 458	Advanced Entrepreneurship	
BMGT 467	Global Operations and Supply Chain Management	
BMGT 480	Cross-Cultural Mgmt	
BMGT 491	Special Topics	
BMGT 493	International Experience	
BMGT 494	Seminar/Workshop	
BMGT 498	Internship	
COMX 415	Intercultural Communication	
ECNS 312	Labor Economics	
PSCI 462	Human Resource Management	
Total Hours		12

Minimum Required Grade: C-

Marketing B.S.

- Overview
- Requirements

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

College of Business

Degree Specific Credits: 72-74

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Notes:

- At least 54 credits must be earned in Business classes (ECNS, College of Business internship course and COB faculty-led study abroad courses may be counted in OR out of Business). A minimum GPA of 2.0 is required for these courses.
- At least 27 credits in business must be taken at UM.
- All business credits transferred in after matriculating to UM must be preapproved by the department chair in your major.

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

Course List		
CODE	**TITLE**	**HOURS**
College of Business Requirements		48-50
Primary Lower Core Courses		
Math Requirement		
Statistics Requirement		
Secondary Lower Core Courses		
Upper Major Core Courses		
Capstone Course and Upper-Division Writing Requirement		
Marketing Major Requirements		15
Marketing Major Electives		9
Total Hours		72-74

College of Business Requirements

Primary Lower Core Courses

Note: All primary lower core courses must be completed with a C- or better and a 2.0 GPA must be earned in the seven (7) listed courses prior to admission into an upper-division Business Major

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
ACTG 201	Principles of Financial Accounting	3
ACTG 202	Principles of Managerial Accounting	3
BMIS 270	MIS Foundations for Business	3
ECNS 201S	Principles of Microeconomics	3
Total Hours		12

Minimum Required Grade: C-

Math Requirement

Notes:

- The College of Business requires that credit be earned for one of the math course below (with a C- or better) before enrolling in ACTG 202.
- A student's result on the ALEKS Math Placement Exam or Maplesoft Math Placement Exam does not waive this math requirement.

Course List		
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		3-4
M 115	Probability and Linear Mathematics	
M 121	College Algebra	
M 151	Precalculus	
M 162	Applied Calculus	
Total Hours		3-4

Minimum Required Grade: C-

Statistics Requirement

Note: This is a lower primary core course. The College of Business requires that credit be earned for STAT 216 (preferred) or one of the other statistics courses below (with a C- or better) prior to being admitted into an upper-division College of Business major.

Course List		
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		3-4
FORS 201	Forest Biometrics	
PSYX 222	Psychological Statistics	
SOCI 202	Social Statistics	
STAT 216	Introduction to Statistics (preferred)	
Total Hours		3-4

Minimum Required Grade: C-

Secondary Lower Core Courses

Note: All courses must be completed with a "C-" or better to satisfy prerequisites for certain major, upper major core, or capstone courses. Students are advised to complete these courses prior to being admitted to an upper-division Business Major. Prerequisites are strictly enforced.

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
BGEN 220E	Business Ethics and Social Responsibility (Students must complete this course with a C- or better prior to taking the capstone, though earlier completion is strongly encouraged.) Ethical & Human Values Requirement	3
COMX 111A	Introduction to Public Speaking (Students must complete this course with a C- or better prior to taking the capstone, though earlier completion is strongly encouraged.) Expressive Arts Requirement	3
CSCI 172	Intro to Computer Modeling	3
ECNS 202S	Principles of Macroeconomics Social Science Requirement	3
Total Hours		12

Minimum Required Grade: C-

Upper Major Core Courses

Notes:

- All upper major core courses must be completed before the capstone can be taken.
- Students must take BMKT 325 in the first semester in the upper-division major as it is a prerequisite course for the Marketing Major.
- A student must be listed as a major or minor in business to take these courses. Major or minor in business is defined as junior standing with all primary lower core courses completed, a 2.0 cumulative GPA, and formally admitted to the major or minor.

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
BFIN 322	Business Finance	3
BGEN 361	Principles of Business Law	3
BMGT 322	Operations Management	3
BMGT 340	Management & Organization Behavior	3
BMKT 325	Principles of Marketing	3
Total Hours		15

Minimum Required Grade: C-

Capstone and Upper-Division Writing Requirement

Notes:

- Students must complete all primary and secondary lower core and upper core courses and their prerequisites and have an approved graduation application to register for their capstones.
- Students must pass the required comprehensive exam as well as all requisite coursework to earn a passing grade in BGEN 499.
- BGEN 499 must be taken at UM.

- This course also satisfies the UM and College of Business upper-division writing requirement.

Course List		
CODE	**TITLE**	**HOURS**
Complete the following course:		
BGEN 499	Strategic Management	3
Total Hours		3

Minimum Required Grade: C-

Marketing Major Requirements

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
BGEN 360	International Business	3
BMKT 337	Consumer Behavior	3
BMKT 342	Marketing Research	3
BMKT 343	Integrated Marketing Comm	3
BMKT 420	Integrated Online Marketing	3
Total Hours		15

Minimum Required Grade: C-

Marketing Major Electives

Notes:

- 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 List		
CODE	**TITLE**	**HOURS**
Complete 3 credits from the following courses:		3
BMKT 440	Marketing Analytics	
BMKT 460	Mktg Hi-Tech Prod & Innov	
BMKT 491	Special Topics	
Complete 6 credits from the following courses:		6
BMGT 401	Event Management	
BMGT 402	Prin of Entertainment Mgmt I	
BMGT 403	Prin of Entertainment Mgmt II	
BMGT 410	Sustainable Business Practices	
BMGT 467	Global Operations and Supply Chain Management	
BMGT 493	International Experience	
BMIS 478	E Commerce a Managerl Prspctv	
BMKT 412	Non Profit Marketing	
BMKT 413	Sports Marketing	
BMKT 494	Seminar	
BMKT 498	Internship	
COMX 351	Principles of Public Relations	
COMX 352	Public Relations Portfolio	
MART 101L	Intro to Media Arts	
MART 102	Digital Technology in the Arts	
MART 111A	Intro to Photoshop	
MART 341	Intro to Web Design	
Total Hours		9

Minimum Required Grade: C-

Digital Marketing Certificate < University of Montana

Digital Marketing Certificate

Post-secondary Certificate - Digital Marketing

College of Business

Degree Specific Credits: 24

Required Cumulative GPA: 3.0

Catalog Year: 2019-2020

Notes:

- 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 COB Advising for list of advisors by major).

Summary

CODE	TITLE	HOURS
Digital Marketing Certificate Requirements		21
Digital Marketing Certificate Electives		3
Total Hours		24

Course List

Digital Marketing Certificate Requirements

CODE	TITLE	HOURS
Complete all of the following courses:		
BMIS 372	Information Infrastructures	3
BMIS 373	Business System Analy & Design	3
BMIS 478	E Commerce a Managerl Prspctv	3
BMKT 342	Marketing Research	3
BMKT 343	Integrated Marketing Comm	3
BMKT 420	Integrated Online Marketing	3
BMKT 460	Mktg Hi-Tech Prod & Innov	3
Total Hours		21

Course List

Minimum Required Grade: C-

Digital Marketing Certificate Electives

CODE	TITLE	HOURS
Complete three credits from the following courses:		3
BMIS 326	Introduction to Data Analytics	
BMIS 365	Business App Development	
BMIS 479	Introduction to Consulting	
FORS 250	Intro to GIS for Forest Mgt	
GPHY 284	Intro to GIS and Cartography	
MART 101L	Intro to Media Arts	
MART 112A	Introduction to Film Editing	
MART 102	Digital Technology in the Arts	
MART 111A	Intro to Photoshop	
MART 341	Intro to Web Design	
Total Hours		3

Course List

Minimum Required Grade: C-

Entertainment Management Certificate < University of Montana

Entertainment Management Certificate

Post-secondary Certificate - Entertainment Management

College of Business

Degree Specific Credits: 18

Required Cumulative GPA: 3.0

Catalog Year: 2019-2020

Notes:

- This certificate is open to all majors across campus.
- The 3.0 GPA requirement pertains specifically to the 18 credits listed below, not a student s cumulative GPA.
- Special Topics courses (x91) and a maximum of three internship credits (x98) may count towards Certificate electives if approved by the UMEM Program Director.

Summary

CODE	TITLE	HOURS
Entertainment Management Certificate Requirements		9
Entertainment Management Certificate Electives		9
Total Hours		18

Course List

Entertainment Management Certificate Requirements

CODE	TITLE	HOURS
Complete all of the following courses:		
BMGT 401	Event Management	3
BMGT 402	Prin of Entertainment Mgmt I	3
BMGT 403	Prin of Entertainment Mgmt II	3
Total Hours		9

Course List

Minimum Required Grade: B

Entertainment Management Certificate Electives

Notes:

- 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.

CODE	TITLE	HOURS
Complete nine credits from the following courses:		9
BFIN 205S	Personal Finance	
BGEN 220E	Business Ethics and Social Responsibility	
BMGT 101S	Intro to Entertainment Mgmt	
BMGT 275	Venue Management	
BMGT 375	Business of Film & Television	
BMGT 420	Leadership and Motivation	
BMGT 474	Entertainment Rsrch & Planning	
BMGT 498	Internship	
BMIS 478	E Commerce a Managerl Prspctv	
BMKT 412	Non Profit Marketing	
BMKT 413	Sports Marketing	
BMKT 420	Integrated Online Marketing	
MART 112A	Introduction to Film Editing	
MART 111A	Intro to Photoshop	
MUSI 130L	History of Jazz	
MUSI 132L	History of Rock & Roll	
MUSI 202L	Intro to Music Literature	
MUSI 302H	Music History II	
NPAD 466	Nonprofit Adm & Pub Svc	
THTR 370	Stage Management I	
Total Hours		9

Course List

Minimum Required Grade: B

Entrepreneurship and New Venture Creation Certificate < University of Montana

Entrepreneurship and New Venture Creation Certificate

Post-Secondary Certificate - Entrepreneurship and New Venture Creation

College of Business

Degree Specific Credits: 15

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note:

- All student pursuing a Certificate in Entrepreneurship and New Venture Creation must also complete the degree requirements for one of the Business majors. This certificate is of particular interest to students interested in launching their own business venture, working for a startup, or launching new initiatives with more established businesses.
- A 2.0 GPA requirement pertains specifically to the 15 credits listed below, not a student s cumulative GPA.

Summary

CODE	TITLE	HOURS
Entrepreneurship and New Venture Creation Certificate Requirements		9
Entrepreneurship and New Venture Creation Certificate Electives		6
Total Hours		15

Course List

Entrepreneurship and New Venture Creation Certificate Requirements

CODE	TITLE	HOURS
Complete all of the following courses:		
BMGT 448	Entrepreneurship	3
BMGT 458	Advanced Entrepreneurship	3
BMGT 498	Internship (or submit a written new venture idea for adjudication to the John Ruffatto Business Startup Challenge (BSC), be selected for participation and present their idea at the BSC)	3
Total Hours		9

Course List

Entrepreneurship and New Venture Creation Certificate Electives

CODE	TITLE	HOURS
Complete two of the following courses:		6
BFIN 301	Analysis of Finan Statements	
BMGT 420	Leadership and Motivation	
BMGT 498	Internship (with an Entrepreneurship focus)	
BMIS 372	Information Infrastructures	
BMIS 373	Business System Analy & Design	
BMIS 478	E Commerce a Managerl Prspctv	
BMKT 342	Marketing Research	
BMKT 420	Integrated Online Marketing	
BMKT 460	Mktg Hi-Tech Prod & Innov	
BMGT 492	Independent Study (with an Entrepreneurship Focus)	
Total Hours		6

Course List

Minimum Required Grade: C-

Sustainable Business Strategy Certificate < University of Montana

Sustainable Business Strategy Certificate

Post-secondary Certificate - Sustainable Business Strategy

College of Business

Degree Specific Credits: 12

Required Cumulative GPA: 3.0

Catalog Year: 2019-2020

Notes:

- The 3.0 GPA requirement pertains specifically to the 12 credits listed below, not a student s cumulative GPA. 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 CoB Advising for list of advisors by major).

Summary

CODE	TITLE	HOURS
Sustainable Business Strategy Required Courses		6
Sustainable Business Strategy Elective Courses		6
Total Hours		12

Course List

Sustainable Business Strategy Required Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
BGEN 445	Sustainability Reporting	3
BMGT 410	Sustainable Business Practices	3
Total Hours		6

Course List

Minimum Required Grade: C-

Sustainable Business Strategy Elective Courses

Note: Only 3 credits of BMGT 493 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.

CODE	TITLE	HOURS
Complete two of the following courses:		6
BMGT 493	International Experience	
ECNS 445	Int Env Econ & Clim Change	
ENST 367	Environmental Politics & Policies	
ENST 487	Globalization, Justice & Environment	
GEO 482	Global Change	
NRSM 349E	Climate Change Ethics/Policy	
NRSM 408	Global Cycles and Climate	
NRSM 475	Environment & Development	
Total Hours		6

Course List

Minimum Required Grade: C-

College of Business Graduate Programs Overview

Opportunity for further study at the graduate level is offered through programs leading to the degrees of

- **Master of Accountancy (M-Acct.)**,
- **Master of Business Administration (M.B.A.)**,
- **Master of Science in Business Analytics (M.S.-B.A.)**
- Joint J.D./M.B.A.,
- Joint M.B.A./D.P.T. and
- Joint M.B.A./Pharm.D.

The M.B.A. M.S. - B.A. and M-Acct. programs are suited to all students regardless of undergraduate training. Students in the arts and sciences or other professional schools are encouraged to consider these graduate business programs. Further details may be obtained from the Graduate School or by specific inquiries directed to: Director of M.B.A. Program, College of Business, Director of M.S.-B. A. Program College of Business or Director of M-Acct. Program, College of Business.

Foundation Program for Graduate Work in Business

Completion of all of the foundation courses listed below (or equivalents) 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).

		Course List
CODE	**TITLE**	**HOURS**
Foundation Courses		
ACTG 201	Principles of Financial Accounting	3
ACTG 202	Principles of Managerial Accounting	3
BGEN 361	Principles of Business Law	3
BFIN 322	Business Finance	3
BMIS 270	MIS Foundations for Business	3
BMGT 322	Operations Management	3
BMGT 340	Management & Organization Behavior	3
BMKT 325	Principles of Marketing	3
ECNS 201S	Principles of Microeconomics	3
STAT 216	Introduction to Statistics	4
Total Hours		31

Nine of the 10 courses in the Foundation Program are included in the undergraduate Minor in Business Administration, which is open to any undergraduate student. The College of Business 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 **College of Business Graduate School website.**

Foundation Program for M.S.-B.A. Program

The M.S.-B.A. program is open to graduates of business and non-business undergraduate programs. The program can be completed in one year for students who have completed the following foundation courses, or their equivalent:

		Course List
CODE	**TITLE**	**HOURS**
BMIS 326	Introduction to Data Analytics	3
BMKT 560	Marketing & Stats	3-7
or STAT 216 & BMKT 325	Introduction to Statistics and Principles of Marketing	
STAT 451	Statistical Methods I	3
Business analytics internship or work experience		
Total Hours		9-13

For more information, please visit the University of Montana **College of Business M.S.-B.A. website**.

University Of Montana

Master of Accountancy

- **Overview**

Partners in large firms. Sole proprietors. Business owners. Leaders in nonprofits and governments. CFOs and consultants. You can realize your dreams with the right preparation. Graduates of our Master of Accountancy (MAcct) program are successful professionals in organizations throughout the country. Our top-notch curriculum and robust Career Development program set you up for success.

Master of Accountancy

College of Business

Degree Specific Credits: 30

Required Cumulative GPA: 3.0

Catalog Year: 2019-2020

Requirements

Accounting Core

- Accounting & Data Analytics
- Advanced Taxation
- Advanced Audit
- Advanced Financial Topics
- Accounting Theory
- Accounting Law & Ethics

Sample Electives

- Tax Research
- Auditor Judgment
- Tax & Business Strategies
- VITA
- Accounting Problems (CPA prep)
- Sustainability Reporting
- Business Valuation
- Communicating Financial Information
- Business Writing
- Accounting Internship

Master of Business Administration

- Overview

The University of Montana MBA prepares students to operate in today's rapidly changing professional environment. We help you broaden and deepen your knowledge and skills so you can meet today's challenges and succeed in the workplace of the future.

No matter your schedule or where you are located, the UM MBA — Montana's only MBA — will help you meet your goals.

Master of Business Administration

College of Business

Degree Specific Credits: 32

Required Cumulative GPA: 3.0

Catalog Year: 2019-2020

MBA Assessment and Assurance of Learning Goals

As part of our assessment process and assurance-of-learning standards, the MBA Curriculum and Assessment Committee has adopted six learning goals for MBA students. MBA students will have an understanding of:

1. Integrated knowledge of business functions
2. Communication skills and teamwork ability
3. Ethical conduct, social responsibility and professional leadership
4. Analytical and innovative thinking in business problem solving
5. Knowledge and application of current trends in information technology
6. Ability to evaluate implications of operating in the global business environment

Requirements

Required Core Courses (19 credits)

Autumn Semester Offerings

Course	Name	Credits	Offered
ACTG 605	Administrative Controls	2	Wk. 1-10
BMGT 640	Organizational Behavior	2	Wk. 1-10
BMGT 650	Business Ethics	1	Wk. 11-15
BMGT 604	Competitive Strategy	1	Wk. 1-5
BMIS 674	Mgmt of Information Systems	2	Wk. 6-15
BFIN 681	Financial Management	2	Wk. 6-15

Spring Semester Offerings

Course	Name	Credits	Offered
BMKT 660	Marketing Management	2	Wk. 1-10
BMIS 650	Quantitative Analysis	2	Wk. 1-10
BMGT 685	International Business	2	Wk. 6-15
MBA 603	Integrated Project	1	Wk. 11-15
BMGT 665	Strategic Management	2	Wk. 1-10

Elective Courses (13 credits required)

Fall, Spring, and Summer Offerings

Masters of Business Administration students can choose from a wide selection of electives. Most elective courses are offered as one credit weekend classes in Missoula. In addition, we offer several daytime on-campus and flex delivery electives. Students can receive credit for independent study and internships that help them gain practical experience in their field of interest. Finally, students have the option of completing a study abroad and / or participate in an exchange program to enhance their global training. Also acceptable, per approval, are up to 6 credits of 400-level courses taken for graduate credit.

Master of Science in Business Analytics

- **Overview**

Whether you are a business professional, a person looking to re-tool your skill set for the cutting-edge field of data analytics, or a talented undergraduate, the University of Montana's Master's of Science in Business Analytics prepares graduates for successful careers at the intersection of business, statistics, and computing.

Master of Science in Business Analytics

College of Business

Degree Specific Credits: 32

Required Cumulative GPA: 3.0

Catalog Year: 2019-2020

Requirements

Foundations Courses (9 credits)

Course	Name	Credits	Offered
BMKT 560	Marketing & Statistics	3	All Term
STAT 451	Statistical Methods	3	Fall / Summer
BMIS 326	Intro to Data Analytics	3	All Terms
Internship / Work Experience			

Required Core Courses (20 credits)

Autumn Semester Offerings

Course	Name	Credits
BMIS 642	Advanced Marketing Research	3
BMKT 670	Applied Data Analytics	3
BMIS 625	Text Mining of Unstructured Data	3

Spring Semester Offerings

Course	Name	Credits
BMIS 601	Business Intelligence	3
BMIS 650	Quantitative Analysis	2
BMKT 680	Big Data & Innovation	3
BMKT 699	MSBA Capstone	

Elective Courses (12 credits required)

A wide variety of elective opportunities allows students to customize the program to their own career goals.

University Of Montana

The electives listed below are a sample of the electives that are available. Having an array of options allows students to design the MSBA program to meet their needs. Electives also include independent studies and internships.

- Integrated Online Marketing
- Data Visualization
- Applications of Mining Big Data
- Investigations
- Digital Tech in the Arts I
- Introduction to Consulting
- Mgmt of Information Systems

Explore full descriptions of core classes and electives in the MSBA program.

College of Health Professions and Biomedical Sciences < University of Montana

College of Health Professions and Biomedical Sciences

Reed Humphrey, Dean

The College of Health Professions and Biomedical Sciences (CHPBS) houses four schools that provide undergraduate and graduate degrees for professional, clinical, and research careers. Opportunities to receive certificates and dual degrees are available. In addition, the College provides advising for pre-medical sciences and offers courses in the health sciences that are open to students in all majors. The College is a member of the campus-wide UM Health and Medicine (UMHM) program that connects students, degree programs, researchers, and community partners. The College is also associated with the Family Medicine Residency of Western Montana and the Western Montana AHEC.

Schools within the College:

- Skaggs School of Pharmacy
- School of Physical Therapy and Rehabilitative Sciences
- School of Public and Community Health Sciences
- School of Integrative Physiology and Athletic Training
- School of Speech, Language, Hearing, and Occupational Sciences
- School of Social Work

Undergraduate Degree Programs:

- Doctor of Pharmacy (Pharm.D.)
- Bachelor of Science in Pharmaceutical Sciences (this option restricted to Pharm.D. students)
- Bachelor of Arts in Social Work

Graduate Degree Programs:

Pharmaceutical Sciences:

- Master of Science (M.S.):
  - Medicinal Chemistry
  - Neuroscience
  - Pharmaceutical Sciences and Drug Design
  - Toxicology
- Doctor of Philosophy (Ph.D.):
  - Medicinal Chemistry
  - Neuroscience
  - Pharmaceutical Sciences and Drug Design
  - Toxicology

Physical Therapy:

- Doctor of Physical Therapy (D.P.T.)

Public Health:

- Master of Public Health (M.P.H.)
- Doctor of Philosophy (Ph.D.) in Public Health

Social Work:

- Master of Social Work (M.S.W.)

Health and Human Performance Department

John Quindry, Chair

Tony Ward, Chair

Vision

Health and Human Performance Professionals

Creating a Healthy, Progressive Global Community

Mission

In pursuit of our vision, the School of Integrative Physiology and Athletic Training 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 Health Professions and Biomedical Sciences, the School of Integrative Physiology and Athletic Training engages in professional education, scholarly activity, and meaningful public service. The school emphasizes mental, social, spiritual, and physical dimensions of health to promote healthy lifestyle choices and enhanced quality of life.

The School of Integrative Physiology and Athletic Training 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 student 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 major in Health & Human Performance (HHP). HHP majors choose from one of the following five concentrations:

1. Public and Community Health,
2. Exercise Science Applied,
3. Exercise Science Pre-Athletic Training, or
4. Exercise Science Pre-Professional

The **Public and Community Health concentration** 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 concentration 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.

There are three options **Exercise Science**:

- Pre-Professional,
- Applied, and
- Pre-Athletic Training.

The ***Pre-Professional concentration*** is for students planning to continue on in higher education and 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, athletic training, occupational therapy or other medical programs. There are adequate electives in this program for most students to complete the required pre-requisite courses for graduate health science degrees. Successful graduates of this option should possess the knowledge and skills to qualify for the American College of Sports Medicine Certified Clinical Exercise Physiologist certification (requires additional clinical hours).

The ***Applied concentration*** 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 or graduate studies in Exercise Science. Successful graduates of this track should possess the knowledge and skills to qualify for the American College of Sport Medicine Certified

Exercise Physiologist certification and/or National Strength and Conditioning Association Certified Strength and Conditioning Specialist.

The ***Pre-Athletic Training concentration*** is designed for students interested in applying for the Master's in Athletic Training Program (see information below).

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 concentrations include:

- Exercise Science,
- Community Health and Prevention Sciences,
- Athletic Training and
- a generalist degree in 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 100-299, and ACTV 189) 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 in the catalog. See index.

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.

Admission Policies for Health Enhancement Concentration

The Health Enhancement concentration 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 the HHP web site: 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

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 Master's in AT Program was granted CAATE accreditation in 2015. 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.1

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.

1	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 1st) 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 the website at: http://coehs.umt.edu/umat/applications.php.

ADMISSION REQUIREMENTS FOR PROFESSIONAL ATHLETIC TRAINING PROGRAM (ATP)

1. Students must apply and be accepted to the University of Montana s Graduate School website 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. 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 less than a "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

For further information on clinical education requirements, please visit the athletic training website.

Additional Costs Associated with ATP 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)
  - Vaccinations ($50)
  - Initial NATA Membership Fee (approximately $60),

Transportation is needed for all off-campus clinical sites. Each student will have a minimum of one off-campus site.

General HHP Program Requirements

First Aid and CPR Exit Certifications

All Health and Human Performance students are required to have the appropriate certification in Basic Life Support at graduation. The following certifications will meet this competency:

Academic credit for ECP 120 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 two upper-division writing courses to fulfill the General Education writing requirements; KIN 447 and AHAT 342/AHAT 343. Exercise Science and Public and Community Health students can complete KIN 447 or AHAT 342/AHAT 343, and Health Enhancement students are required to complete HEE 301.

The typical student may take more than four years to complete these requirements, especially in the Health Enhancement concentration.

Undergraduate

- Health & Human Performance B.S., Public & Community Health Concentration
- Health & Human Performance B.S., Exercise Science - Applied Concentration
- Health & Human Performance B.S., Exercise Sciences - Pre-Professional Concentration

Undergraduate Certificate

- Health Behavior Coaching Professional Certificate

Exercise Science - Applied, Health and Human Performance B.S.

Bachelor of Science - Health & Human Performance; Exercise Science - Applied Concentration

College of Health Professions and Biomedical Sciences

Degree Specific Credits: 91-94

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

Course List		
CODE	**TITLE**	**HOURS**
Lower-Division Departmental Required Courses		12
Outside Major Lower-Division Required Courses		31-34
Upper-Division Departmental Required Courses		22
Outside Major Upper-Division Required Courses		8
Elective Courses		18
Total Hours		91-94

Lower-Division Departmental Required Courses

Note: Students should take ECP 120 within two years of graduation in order to ensure current certification. Students may substitute outside Emergency Medical Responder Certification for these courses.

		Course List
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		3
ECP 120	Emergency Medical Responder Lecture	3
KIN 201	Basic Exercise Prescription	3
KIN 205	Foundations of HHP	3
NUTR 221N	Basic Human Nutrition	3
Total Hours		12

Minimum Required Grade: C-

Outside Major Lower-Division Required Courses

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.

		Course List
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		3
Human Form And Function I		
Human Form And Function II		
Principles Of Living Systems		
Complete all of the following courses:		
CHMY 121N	Introduction to General Chemistry OR CHMY 141 OR CHMY 143	4
CHMY 123	Introduction to Organic and Biochemistry OR CHMY 221 OR CHMY 223	4
CHMY 124	Introduction to Organic and Biochemistry Lab OR CHMY 222 or CHMY 224	2
COMX 111A	Introduction to Public Speaking	3
PHSX 205N	College Physics I	4
PHSX 206N	College Physics I Laboratory	1
PSYX 100S	Intro to Psychology	3
Complete one of the following:		4-6
M 151	Precalculus	
M 121 & M 122	College Algebra and College Trigonometry	
Complete one of the following:		3-4
STAT 216	Introduction to Statistics	
PSYX 222	Psychological Statistics (must be pre-approved by advisor)	
SOCI 202	Social Statistics (must be pre-approved by advisor)	
EDU 421	Statistical Procedures in Educ (must be pre-approved by advisor)	
Total Hours		31-34

Minimum Required Grade: C-

Upper-Division Departmental Required Courses

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
HTH 475E	Legal and Ethical Issues Health and Exercise Professions	3
KIN 320	Exercise Physiology	3
KIN 321	Exercise Physiology Lab	1
KIN 330	Motor Learning and Control	3
KIN 425	Biomechanics	3
KIN 447	Analytical & Communicative Techniques	3
KIN 498	Internship	3
NUTR 411	Nutrition For Sports & Exercise	3
Total Hours		22

Minimum Required Grade: C-

Outside Major Upper-Division Required Courses

Note: It is strongly recommended that students take either BIOH 112 OR BIOH 113 OR BIOB 160N prior to taking Anatomy and Physiology.

Course List		
CODE	**TITLE**	**HOURS**
Complete one of the following Anatomy and Physiology Sequences:		8
University of Montana - Mountain Campus		
BIOH 365 & BIOH 366	Human Anatomy and Physiology for Health Professions I and Human Anatomy and Physiology for Health Professions I Laboratory	
BIOH 370 & BIOH 371	Human Anatomy and Physiology for Health Professions II and Human Anatomy and Physiology for Health Professions II Laboratory	
Missoula College		
BIOH 201N & BIOH 211N	Human Anat Phys I (equiv 301) and Human Anat Phys II (equiv 311)	
Total Hours		8

Minimum Required Grade: C-

Elective Courses

		Course List
CODE	**TITLE**	**HOURS**
Complete the following elective credits:		18
Electives require adviser consent. Students should take an appropriate number of Upper Division Electives to achieve 39 Upper Division Credits, per UM graduation requirements. You should use your elective courses to meet the additional prerequisite course requirements of graduate programs you are interested in attending.		

Minimum Required Grade: C-

University Of Montana

Public and Community Health, Health and Human Performance B.S.

Bachelor of Science - Health & Human Performance; Public and Community Health Concentration

College of Health Professions and Biomedical Sciences

Degree Specific Credits: 84-85

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

		Course List
CODE	**TITLE**	**HOURS**
Lower-Division Required Courses		15
Outside Major Lower-Division Required Courses		33-34
Upper-Division Departmental Required Courses		30
Outside Major Upper-Division Required Courses		6
Total Hours		84-85

Lower-Division Required Courses

Note: Students should take ECP 120 within two years of graduation in order to ensure current certification. Students may substitute outside Emergency Medical Responder Certification for these courses.

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
ECP 120	Emergency Medical Responder Lecture	3
HTH 110	Personal Health and Wellness	3
KIN 201	Basic Exercise Prescription	3
KIN 205	Foundations of HHP	3
NUTR 221N	Basic Human Nutrition	3
Total Hours		15

Minimum Required Grade: C-

Outside Major Lower-Division Required Courses

Note: It is strongly recommended that students take either BIOH 112 OR BIOH 113 OR BIOB 160N as an elective course prior to taking Anatomy and Physiology (BIOH 201N andBIOH 211N).

		Course List
CODE	**TITLE**	**HOURS**
Complete one of the following Anatomy & Physiology sequences:		8
University of Montana - Mountain Campus		
BIOH 365 & BIOH 366	Human Anatomy and Physiology for Health Professions I and Human Anatomy and Physiology for Health Professions I Laboratory	
BIOH 370 & BIOH 371	Human Anatomy and Physiology for Health Professions II and Human Anatomy and Physiology for Health Professions II Laboratory	
Missoula College		
BIOH 201N	Human Anat Phys I (equiv 301)	
BIOH 211N	Human Anat Phys II (equiv 311)	
Complete all of the following courses:		
BIOM 250N	Microbiology for Hlth Sciences	3
CHMY 121N	Introduction to General Chemistry	4
COMX 111A	Introduction to Public Speaking	3
ENST 225S	Sustainable Communities	3
M 115	Probability and Linear Mathematics	3
PSYX 100S	Intro to Psychology	3
WGSS 263S	Social and Political Perspectives on Gender and Sexuality	3
Complete one of the following courses:		3-4
STAT 216	Introduction to Statistics	
PSYX 222	Psychological Statistics (must be pre-approved by advisor)	
SOCI 202	Social Statistics (must be pre-approved by advisor)	
EDU 421	Statistical Procedures in Educ (must be pre-approved by advisor)	
Total Hours		33-34

Minimum Required Grade: C-

Upper-Division Departmental Required Courses

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
CHTH 355	Theory Practicum Community Health Education	3
CHTH 445	Program Planning in Community Health	4
CHTH 485	Theories of Health Behaviors and Counseling	3
CHTH 498	Internship	4
HTH 370	Peer Health Education	3
HTH 395	Peer Health Practicum	1
HTH 430	Health and Mind/Body/Spirit	3
HTH 465	Leading Health and, Human Perform Orgs	3
HTH 475E	Legal and Ethical Issues Health and Exercise Professions	3
KIN 447	Analytical & Communicative Techniques	3
Total Hours		30

Minimum Required Grade: C-

Outside Major Upper-Division Required Courses

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
ANTY 426	Culture, Health and Healing	3
S W 423	Addiction Studies	3
Total Hours		6

Minimum Required Grade: C-

University Of Montana

Exercise Science - Pre-Professional, Health and Human Performance B.S.

Bachelor of Science - Health & Human Performance; Exercise Science - Pre-Professional Concentration

College of Health Professions and Biomedical Sciences

Degree Specific Credits: 106-109

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

		Course List
CODE	**TITLE**	**HOURS**
Lower-Division Departmental Required Courses		12
Outside Major Lower-Division Required Courses		46-49
Upper-Division Departmental Required Courses		22
Outside Major Upper-Division Required Courses		8
Elective Courses		18
Total Hours		106-109

Lower-Division Departmental Required Courses

Note: Students should take ECP 120 within two years of graduation in order to ensure current certification. Students may also substitute outside Emergency Medical Responder Certification for these courses.

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
ECP 120	Emergency Medical Responder Lecture	3
KIN 201	Basic Exercise Prescription	3
KIN 205	Foundations of HHP	3
NUTR 221N	Basic Human Nutrition	3
Total Hours		12

Minimum Required Grade: C-

Outside Major Lower-Division Required Courses

Notes: Students interested in medical or dental school should replace CHMY 121N, CHMY 123 and CHMY 124 with CHMY 141N/CHMY 142N, CHMY 143N/CHMY 144N, CHMY 221/CHMY 222, and CHMY 223/CHMY 224. Students interested in physical therapy or other graduate medical professions generally take CHMY 121N, CHMY 123 and CHMY 124. You should talk to the HHP advisors prior to starting your chemistry series

		Course List
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		8
BIOH 112	Human Form and Function I	
BIOH 113	Human Form and Function II	
BIOB 160N	Principles of Living Systems	
Complete all of the following courses:		
BIOB 170N	Princpls Biological Diversity	3
BIOB 171N	Princpls Biological Dvrsty Lab	2
Complete one of the Chemistry sequences:		10
General Chemistry, Complete one of the following courses:		
CHMY 121N	Introduction to General Chemistry	
CHMY 141N & CHMY 142N	College Chemistry I and College Chemistry I Lab	
CHMY 143N & CHMY 144N	College Chemistry II and College Chemistry II Lab	
Organic and Biochemistry, Complete one of the following series:		4-6
CHMY 123 & CHMY 124	Introduction to Organic and Biochemistry and Introduction to Organic and Biochemistry Lab	
CHMY 221 & CHMY 222	Organic Chemistry I and Organic Chemistry I Lab	
CHMY 223 & CHMY 224	Organic Chemistry II and Organic Chemistry II Lab	
Complete one of the following:		4-6
M 121 & M 122	College Algebra and College Trigonometry	
M 151	Precalculus	
M 162	Applied Calculus	
M 171	Calculus I	
Complete one of the following physics sequences:		10
Algebra- and Trigonometry-based:		
PHSX 205N & PHSX 206N	College Physics I and College Physics I Laboratory	

PHSX 207N & PHSX 208N	College Physics II and College Physics II Laboratory	
Calculus-based:		
PHSX 215N & PHSX 216N	Fund of Physics w/Calc I and Physics Laboratory I w/Calc	
PHSX 217N & PHSX 218N	Fund of Physics w/Calc II and Physics Laboratory II w/Calc	
Complete one of the following courses:		3-4
STAT 216	Introduction to Statistics (must be pre-approved by advisor)	
PSYX 222	Psychological Statistics (must be pre-approved by advisor)	
SOCI 202	Social Statistics (must be pre-approved by advisor)	
EDU 421	Statistical Procedures in Educ (must be pre-approved by advisor)	
Complete all of the following courses:		
COMX 111A	Introduction to Public Speaking	3
PSYX 100S	Intro to Psychology	3
Total Hours		46-49

Minimum Required Grade: C-

Upper-Division Departmental Required Courses

		Course List
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
HTH 475E	Legal and Ethical Issues Health and Exercise Professions	3
KIN 320	Exercise Physiology	3
KIN 321	Exercise Physiology Lab	1
KIN 330	Motor Learning and Control	3
KIN 447	Analytical & Communicative Techniques	3
or AHAT 342	Therapeutic Interventions	
KIN 460	ECG Assessment	2
KIN 483	Exercise Disease & Aging	3
KIN 484	Exercise Disease & Aging Lab	1
KIN 498	Internship	3
or KIN 499	Capstone	
Total Hours		22

Minimum Required Grade: C-

Outside Major Upper-Division Required Courses

Notes: Students are required to take either BIOH 112 OR BIOH 113 OR BIOB 160N prior to taking Anatomy and Physiology. Students who take the BIOH 201N and BIOH 211N Anatomy and Physiology series may need to take additional upper division credits beyond the courses required in this concentration to meet the university of Montana requirement of 39 upper-division credits for graduation.

Course List		
CODE	**TITLE**	**HOURS**
Complete one of the following Anatomy and Physiology sequences:		8
University of Montana - Mountain Campus		
BIOH 365 & BIOH 366	Human Anatomy and Physiology for Health Professions I and Human Anatomy and Physiology for Health Professions I Laboratory	
BIOH 370 & BIOH 371	Human Anatomy and Physiology for Health Professions II and Human Anatomy and Physiology for Health Professions II Laboratory	
Missoula College		
BIOH 201N & BIOH 211N	Human Anat Phys I (equiv 301) and Human Anat Phys II (equiv 311)	
Total Hours		8

Minimum Required Grade: C-

Elective Courses

		Course List
CODE	**TITLE**	**HOURS**
Complete the following elective credits:		18
Electives require adviser consent. Students should take an appropriate number of Upper Division Electives to achieve 39 Upper Division Credits, per UM graduation requirements. You should use your elective courses to meet the additional prerequisite course requirements of graduate programs you are interested in attending.		

Minimum Required Grade: C-

Health Behavior Coaching Certificate

Admission requirements for the Certificate Program in Health Behavior Coaching include:

1. Sophomore level or higher standing;
2. 3.0 GPA;
3. BIOH 201N and BIOH 202N or BIOH 113 pre-requisite or co-requisite; and
4. letter of intent.

The Student Wellness Program and Health and Human Performance are collaborating on the Health Behavior Coach Certificate. Staff in the Wellness Program will offer the 2 day training and will be able to monitor whether students have met that requirement prior to receiving their certificate.

Post-Secondary Certificate - Health Behavior Coaching

College of Health Professions and Biomedical Sciences

Degree Specific Credits: 25

Required Cumulative GPA: 3.0

Catalog Year: 2019-2020

Note: In addition to the courses listed below, students must complete or have completed a bachelor s degree from an accredited university.

Summary

Course List		
CODE	**TITLE**	**HOURS**
Core Courses		25
Total Hours		25

Core Courses

Note: CHTH 494 must be completed for 2 credits and CHTH 498 must be completed for 3 credits

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
CHTH 485	Theories of Health Behaviors and Counseling	3
CHTH 494	Seminar	2
CHTH 498	Internship	3
HTH 370	Peer Health Education	3
HTH 395	Peer Health Practicum	1
HTH 430	Health and Mind/Body/Spirit	3
KIN 201	Basic Exercise Prescription	3
KIN 483	Exercise Disease & Aging	3
KIN 484	Exercise Disease & Aging Lab	1
NUTR 221N	Basic Human Nutrition	3
Total Hours		25

Minimum Required Grade: C-

Athletic Training M.A.T.

- **Overview**

Master of Athletic Training

College of Health Professions and Biomedical Sciences

Degree Specific Credits: 58

Required Cumulative GPA: 3.0

Catalog Year: 2019-2020

Degree Requirements

ATEP 534	Athletic Training Techniques I	3 credits
ATEP 542	Lower Extremity Assessment	3 credits
ATEP 540	Practicum in Athletic Training I	3 credits
ATEP 566	Therapeutic Modalities	3 credits
ATEP 569	Clinical Anatomy Lab	1 credit
HHP 520	Educational Research	3 credits
ATEP 544	Upper Extremity Assessment	3 credits
NUTR 411	Nutrition for Sport & Exercise	3 credits
ATEP 541	Practicum in Athletic Training II	3 credits
HHP 523	Case Studies in Sport Psychology	3 credits
ATEP 572	Therapeutic Exercise	3 credits
ATEP 535	Athletic Training Techniques II (Online)	3 credits
ATEP 574	Manual Therapy Techniques	3 credits
ATEP 550	Practicum in Athletic Training III	3 credits
HHP 699	Thesis	3 credits
ATEP 599	Capstone: Research in AT	3 credits
ATEP 578	Org & Admin in Athletic Training (Online)	3 credits
ATEP 546	General Medical Assessment	3 credits
ATEP 551	Practicum in Athletic Training IV	3 credits
HHP 699	Thesis	3 credits
ATEP 580	Pharmacology in Sports Medicine (Online)	3 credits
Elective	Capstone Option	3 credits
ATEP 599	Capstone: Research in AT (if not taken in Fall)	3 credits

Program fee: There is an additional fee of $1070/semester in addition to regular tuition and fees. This fee will help cover the cost of lab equipment, accreditation costs, adjunct teaching, and software. Other fees may include, but are not limited to: criminal background check ($55), vaccinations ($50) and NATA membership fee ($60).

Skaggs School of Pharmacy < University of Montana

Skaggs School of Pharmacy

Howard D. Beall, Associate Dean for Pharmacy

The Skaggs School of Pharmacy, established in 1907 at Montana State College, was transferred to the University of Montana in 1913, and currently resides in the College of Health Professions and Biomedical Sciences. The Skaggs School of Pharmacy has two departments: Pharmacy Practice and Biomedical and Pharmaceutical Sciences. The School offers professional and graduate degree programs including the entry-level doctor of pharmacy program which 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; Accreditation Council for Pharmacy Education website (http://www.acpe-accredit.org/)

Doctor of Pharmacy: 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. The final four years are in the professional program, which is divided into three years of didactic coursework followed by a year of direct practice in patient care through the experiential courses. 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, pharmaceutics, pharmacology, social and administrative pharmacy, and therapeutics. The final professional year is entirely experiential and designed to fully prepare students to enter the profession as pharmacist patient care providers. The professional curriculum includes required and elective coursework. Students admitted to the Doctor of Pharmacy program also have the opportunity to pursue a dual degree (MBA, MPH, MS Pharmaceutical Sciences) or a BS in Pharmaceutical Sciences degree.

To practice as a pharmacist, one must become a registered pharmacist. This requires graduating with a Pharm.D. degree from an accredited doctor of pharmacy professional program, completing practical experience under the direction of registered pharmacists and passing both the NAPLEX and MPJE exams administered by the National Association of Boards of Pharmacy.

Career opportunities exist in the fields of community pharmacy, ambulatory care pharmacy, hospital and other institutional pharmacy, federal or state government service, public health agencies, and with the pharmaceutical industry. Those with advanced degrees or residency training are in demand for research positions, specialty clinical practice, and clinical faculty positions.

High School Preparation: In addition to the general University admission requirements, coursework in algebra, trigonometry, biology, chemistry, physics and computers/information technology are recommended.

Pre-professional Program: The pre-pharmacy (pre-professional) 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 pre-pharmacy major as their major as early as possible to ensure appropriate advising. Upon designating pre-pharmacy as a major, students will be assigned an advisor from within the pharmacy school.

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. For information on program requirements and the application procedure, refer to Prospective Students on the pharmacy program website(http://health.umt.edu/pharmacy/)

Graduate Degrees in Pharmaceutical & Biomedical Sciences: The School offers graduate degree programs in several areas of pharmaceutical and biomedical sciences. These are research-oriented degrees designed to prepare graduates to create new knowledge and medications for future use in patient care. Students interested in a research career should review the specific requirements for seeking a graduate degree. These graduate-level 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.

Graduate Programs: Students interested in pursuing a graduate research degree should have completed a baccalaureate degree program. Students must apply to the graduate program. Information about the admission requirements and application process are posted on the BMED graduate programs webpage (http://health.umt.edu/biomed/graduate/faq.php)

Department of Pharmacy Practice

Vincent J. Colucci, Chair

The Department of Pharmacy Practice provides academic course work for the Doctor of Pharmacy degree conducts research in the broad area of health care, and provides service to the profession of pharmacy and other health care disciplines.

Department of Biomedical and Pharmaceutical Sciences

Elizabeth A. Putnam, 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. Graduate degree programs include the M.S. and Ph.D. in:

University Of Montana

- Medical Chemistry
- Neuroscience
- Pharmaceutical Sciences and Drug Design
- Toxicology

Pharmaceutical Sciences B.S. < University of Montana

Pharmaceutical Sciences B.S.

Bachelor of Science - Pharmaceutical Sciences

College of Health Professions and Biomedical Sciences - Skaggs School of Pharmacy

Degree Specific Credits: 115

Required Cumulative GPA: 2.00

Catalog Year: 2019-2020

Note: The B.S. in Pharmaceutical Sciences is restricted to students admitted to the Doctor of Pharmacy program. To be eligible for licensure as a pharmacist, students must obtain the Doctor of Pharmacy degree. See the Doctor of Pharmacy catalog page for more information.

For students seeking an undergraduate degree to prepare for research rather than clinical practice, please see the B.S. in Chemistry, concentration in Pharmacology.

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

CODE	TITLE	HOURS
Lower-Division Core Courses		50
Biology		
General and Organic Chemistry		
Physics		
Mathematics		
Communication & Social Sciences		
Upper-Division Core Courses		65
Pharmaceutical & Biomedical Sciences		
Clinical Sciences		
Social, Behavioral, & Administrative Sciences		
Introductory Pharmacy Practice Experiences (IPPE)		
Total Hours		115

Course List

Lower-Division Core Courses

Biology

CODE	TITLE	HOURS
Complete all of the following courses:		
BIOH 112	Human Form and Function I	3
BIOH 113	Human Form and Function II	3
BIOB 260	Cellular and Molecular Biology	4
Total Hours		10

Course List

Minimum Required Grade: C-

General and Organic Chemistry

CODE	TITLE	HOURS
Complete all of the following courses:		
CHMY 141N & CHMY 142N	College Chemistry I and College Chemistry I Lab	5
CHMY 143N & CHMY 144N	College Chemistry II and College Chemistry II Lab	5
CHMY 221 & CHMY 222	Organic Chemistry I and Organic Chemistry I Lab	5
CHMY 223	Organic Chemistry II	3
Total Hours		18

Course List

Minimum Required Grade: C-

Physics

CODE	TITLE	HOURS
Complete all of the following courses:		
PHSX 205N & PHSX 206N	College Physics I and College Physics I Laboratory	5
Total Hours		5

Course List

Minimum Required Grade: C-

Mathematics

CODE	TITLE	HOURS
Complete the following course:		
M 162	Applied Calculus	4
Complete one of the following courses:		4
STAT 216	Introduction to Statistics	
PSYX 222	Psychological Statistics	
SOCI 202	Social Statistics	
Total Hours		8

Course List

Minimum Required Grade: C-

Communication & Social Sciences

CODE	TITLE	HOURS
Complete all of the following courses:		
COMX 111A	Introduction to Public Speaking	3
or THTR 120A	Introduction to Acting I	
PSYX 100S	Intro to Psychology	3
or SOCI 101S	Introduction to Sociology	
ECNS 201S	Principles of Microeconomics	3
Total Hours		9

Course List

Minimum Required Grade: C-

Upper-Division Core Courses

Rule: Students must be admitted to the Doctor of Pharmacy degree program and complete all required coursework for the first two years including the first IPPE. 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 the catalog for details.

In addition, students must demonstrate proficiency in pharmaceutical calculation by successfully completing a competency assessment prior to entering the second professional year.

Pharmaceutical & Biomedical Sciences

CODE	TITLE	HOURS
Complete all of the following courses:		
PHAR 329	Microbes & Medicines	4
PHAR 331	Pharmaceutics	4
PHAR 341 & PHAR 361	Pharmaceutical Pathophysiology I and Pharm Sci Lab I	5
PHAR 342 & PHAR 362	Pharmaceutical Pathophysiology II and Pharm Sci Lab II	5
PHAR 371	Integrated Studies I	1
PHAR 372	Integrated Studies II	1
PHAR 381	Pharmaceutical Biochemistry	4
PHAR 421	Medicinal Chem I	3
PHAR 422	Medicinal Chem II	3
PHAR 443	Pharmacol & Toxicol I	4
PHAR 444	Pharmacology & Toxicol II	4
Total Hours		38

Course List

Minimum Required Grade: C-

Clinical Sciences

CODE	TITLE	HOURS
Complete all of the following courses:		
PHAR 432	Clinical Pharmacokinetics	3
PHAR 451 & PHAR 471	Therapeutics I and Integrated Studies III	4
PHAR 452 & PHAR 472	Therapeutics II and Integrated Studies IV	4
Total Hours		11

Course List

Minimum Required Grade: C-

Social, Behavioral & Administrative Sciences

CODE	TITLE	HOURS
Complete all of the following courses:		
PHAR 300 & PHAR 360	Pharmacy Practice I and Pharmacy Practice Lab I	5
PHAR 310	Pharmacy Practice II	2
PHAR 311	Healthy People	1
PHAR 350	Drug Info	1
PHAR 412 & PHAR 463	Pharmacy Practice III and Pharmaceutical Care Lab III	3
PHAR 460	Pharmaceutical Care Lab II	1
Total Hours		13

Course List

Minimum Required Grade: C-

Introductory Pharmacy Practice Experiences (IPPE)

CODE	TITLE	HOURS
Complete all of the following courses:		
PHAR 480	Community Pharmacy IPPE	3
Total Hours		3

Course List

Minimum Required Grade: C-

Doctor of Pharmacy < University of Montana

Doctor of Pharmacy

- Overview
- Requirements

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 with a minimum of 136 credits in the professional program.
6. Complete all other accreditation-required activities for pharmacy students (ACPE Standards 2016).

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 with a Doctor of Pharmacy degree; however, an applicant will not receive a license until all requirements have been met.

Doctor of Pharmacy

College of Health Professions and Biomedical Sciences - Skaggs School of Pharmacy

Degree Specific Credits: 200 (64 Pre-pharmacy and 136 Professional credits)

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: Pre-pharmacy coursework must be completed before entering the professional pharmacy program. Students should note some pre-pharmacy courses have prerequisites and they should consider that when planning their schedules. In addition, applicants to the professional pharmacy program must present proof of having completed at least 20 hours of observation 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. Applications for the professional program are submitted through the PharmCAS system. See the School s prospective student webpage for more information.

Summary

CODE	TITLE	HOURS
Pre-Pharmacy Requirements		64
Biology		
General and Organic Chemistry		
Physics		
Mathematics		
Communication & Social Sciences		
Pre-Pharmacy Electives		
Professional Pharmacy Curriculum		136
Pharmaceutical & Biomedical Sciences		
Clinical Sciences		
Social Behavioral & Administrative Sciences		
Introductory & Advanced Pharmacy Practice Experiences (IPPE & APPE)		
Total Hours		200

Course List

Pre-Pharmacy Requirements

Biology

CODE	TITLE	HOURS
Complete all of the following courses:		
BIOH 112	Human Form and Function I	3
BIOH 113	Human Form and Function II	3
BIOB 260	Cellular and Molecular Biology	4
Total Hours		10

Course List

Minimum Required Grade: C-

General and Organic Chemistry

CODE	TITLE	HOURS
Complete all of the following courses:		
CHMY 141N & CHMY 142N	College Chemistry I and College Chemistry I Lab	5
CHMY 143N & CHMY 144N	College Chemistry II and College Chemistry II Lab	5
CHMY 221 & CHMY 222	Organic Chemistry I and Organic Chemistry I Lab	5
CHMY 223	Organic Chemistry II	3
Total Hours		18

Course List

Minimum Required Grade: C-

Physics

CODE	TITLE	HOURS
Complete all of the following courses:		
PHSX 205N & PHSX 206N	College Physics I and College Physics I Laboratory	5
Total Hours		5

Course List

Minimum Required Grade: C-

Mathematics

CODE	TITLE	HOURS
Complete the following course:		
M 162	Applied Calculus	4
Complete one of the following courses:		4
STAT 216	Introduction to Statistics	
PSYX 222	Psychological Statistics	
SOCI 202	Social Statistics	
Total Hours		8

Course List

Minimum Required Grade: C-

Communication & Social Sciences

CODE	TITLE	HOURS
Complete all of the following courses:		
COMX 111A	Introduction to Public Speaking	3
or THTR 120A	Introduction to Acting I	
PSYX 100S	Intro to Psychology	3
or SOCI 101S	Introduction to Sociology	
ECNS 201S	Principles of Microeconomics	3
WRIT 101	College Writing I	3
Total Hours		12

Course List

Minimum Required Grade: C-

Pre-Pharmacy Electives

CODE	TITLE	HOURS
Complete 11 elective credits. Speak with your advisor about completing this requirement.		11
Total Hours		11

Course List

Minimum Required Grade: C-

Professional Pharmacy Curriculum

Students must apply for admission to the professional program. 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.

Pharmaceutical & Biomedical Sciences

CODE	TITLE	HOURS
Complete all of the following courses:		
PHAR 329	Microbes & Medicines	4
PHAR 331	Pharmaceutics	4
PHAR 341 & PHAR 361	Pharmaceutical Pathophysiology I and Pharm Sci Lab I	5
PHAR 342 & PHAR 362	Pharmaceutical Pathophysiology II and Pharm Sci Lab II	5
PHAR 371	Integrated Studies I	1
PHAR 372	Integrated Studies II	1
PHAR 381	Pharmaceutical Biochemistry	4
PHAR 421	Medicinal Chem I	3
PHAR 422	Medicinal Chem II	3
PHAR 443	Pharmacol & Toxicol I	4
PHAR 444	Pharmacology & Toxicol II	4
Total Hours		38

Course List

Minimum Required Grade: C-

Clinical Sciences

CODE	TITLE	HOURS
Complete all of the following courses:		
PHAR 432	Clinical Pharmacokinetics	3
PHAR 451 & PHAR 471	Therapeutics I and Integrated Studies III	4
PHAR 452 & PHAR 472	Therapeutics II and Integrated Studies IV	4
PHAR 553 & PHAR 571	Therapeutics III and Integrated Studies V	5
PHAR 554 & PHAR 563 & PHAR 572	Therapeutics IV and Pharmaceutical Care Lab V and Integrated Studies VI	6
PHAR 565	Pharmacy APPE Preparation	3
Total Hours		25

Course List

Minimum Required Grade: C-

Social, Behavioral & Administrative Sciences

CODE	TITLE	HOURS
Complete all of the following courses:		
PHAR 300 & PHAR 360	Pharmacy Practice I and Pharmacy Practice Lab I	5
PHAR 310	Pharmacy Practice II	2
PHAR 311	Healthy People	1
PHAR 350	Drug Info	1
PHAR 412 & PHAR 463	Pharmacy Practice III and Pharmaceutical Care Lab III	3
PHAR 460	Pharmaceutical Care Lab II	1
PHAR 505 & PHAR 560	Pharmacy Practice IV and Pharmaceutical Care Lab IV	4
PHAR 506	Pharmacy Practice V	3
PHAR 514E	Case Studies Pharm Ethics	3
PHAR 550	Drug Literature Eval	3
PHAR 559	Public Health and Pharmacoeconomics	3
3 credits of elective courses. Please see your advisor for courses that will complete this requirement.		3
Total Hours		32

Course List

Minimum Required Grade: C-

Introductory and Advanced Pharmacy Practice Experiences (IPPE and APPE)

CODE	TITLE	HOURS
Complete all of the following courses:		
PHAR 480	Community Pharmacy IPPE	3
PHAR 481	Hospital Pharmacy IPPE	3
PHAR 579	Comm Pharm APPE	4
PHAR 580	Hosp Pharm APPE	4
PHAR 581	Inpatient APPE	4
PHAR 582	AMB Care APPE	8
Complete 16 credits of the following courses:		16
PHAR 583	Drug Information APPE	
PHAR 584	Specialized Services APPE	
PHAR 585	Geriatric APPE	
PHAR 586	Clinical Speciality APPE	
PHAR 587	Administrative APPE	
PHAR 588	Research APPE	
PHAR 589	Education APPE	
Total Hours		42

Course List

Minimum Required Grade: C-

School of Physical Therapy and Rehabilitation Science < University of Montana

School of Physical Therapy and Rehabilitation Science

Anita M. Santasier, Chair

The professional program in physical therapy grants the Doctor of Physical Therapy (DPT) degree. The program has an entry-level DPT program, an entry-level DPT/MBA program, an entry-level DPT/MPH, and a post-entry level transitional DPT curriculum leading to the DPT degree. The following section describes the profession and the pre-professional requirements and application procedures. This information also is available on the program website.

The Profession

Physical Therapy is a health care profession concerned with the habilitation and rehabilitation of individuals with 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 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 prerequisite courses and meet additional application requirements listed on our website. All prerequisite courses must be taken for a traditional letter grade and must be completed with a grade of "C" (2.00) or better.

School of Public and Community Health Sciences < University of Montana

School of Public and Community Health Sciences

Tony Ward, Chair

Located in Missoula, Montana, the University of Montana (UM), School of Public and Community Health Sciences (SPCHS) is housed within the College of Health Professions and Biomedical Sciences (CHPBS). The Montana Board of Regents approved the SPCHS administrative unit in March 2005, with its first class of students enrolled during the Fall 2006.

The SPCHS affords students eight program opportunities: a PhD in Public Health program, a Master of Public Health program, a Master of Public Health with a Community Health and Prevention Sciences program and five graduate-level certificate programs (Public Health, Epidemiology, Global Health, Environmental Health Sciences, and Public Health Administration).

We are the first and only Council on Education for Public Health (CEPH) accredited program in our state. The CEPH Board of Councilors approved the University of Montana s original application for accreditation on June 20, 2009. The CEPH Board of Councilors acted at its June 21-23, 2012, meeting to accredit our MPH Program for a five-year term, extending to July 1, 2017. Our PhD program in Public Health became CEPH accredited on December 20, 2016. CEPH then accredited both our MPH and PhD programs for the maximum of seven years in October of 2017.

What is public health?

Public health practitioners work to solve the world's most pressing health problems. They focus on preventing disease by promoting a healthier lifestyle, implementing educational programs, developing policies, administering services, conducting research, and regulating health systems as a way to achieve these goals.

- What does public health encompass?
  - Public health practitioners work to improve the health of individuals and communities both locally and globally. They confront health issues such as controlling infectious disease and reducing environmental hazards. They also work to develop applications in prevention programs to improve health.
- What impact does public health have on our lives?
  - Public health impacts our lives by creating healthier communities, reducing the impact of natural disasters and global epidemics, and addressing health disparities.
- What types of careers are available in the field of public health?
  - Public Health encompass a wide variety of careers: epidemiology, biostatistics, environmental health, health administration, community health, and preparedness or preventive medicine.

Core Faculty

Tony Ward, Professor, Chair

Annie Belcourt, Associate Professor

Blakely Brown, Professor

Kari Jo Harris, Professor

Erin Landguth, Associate Professor

Kimber McKay, Professor

Sophia Newcomer, Assistant Professor

Curtis Noonan, Professor

Erin Semmens, Assistant Professor

Kathleen (Annie) Sondag, Professor

Website

www.health.umt.edu/publichealth

School of Social Work < University of Montana

School of Social Work

- Overview
- Programs

James Caringi, 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.

Undergraduate

- Social Work B.A.

Undergraduate Minors

- Georontology

Social Work B.A. < University of Montana

Social Work B.A.

Bachelor of Arts - Social Work

College of Health Professions and Biomedical Sciences

Degree Specific Credits: 62

Required Cumulative GPA: 2.75

Catalog Year: 2019-2020

Note: A minimum of 41 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 Social Work courses and completion of 4 of 7 extra departmental courses.

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

CODE	TITLE	HOURS
Lower-Division Core Courses		27
Social Science Requirements		
Economics Requirement		
Biological Requirement		
Upper-Division Core Courses		35
Total Hours		62

Course List

Lower-Division Core Courses

Social Science Requirements

CODE	TITLE	HOURS
Complete all of the following courses:		
PSCI 210S	Intro to American Government	3
PSYX 100S	Intro to Psychology	3
PSYX 230	Developmental Psychology	3
PSYX 233	Fund of Psychology of Aging	3
S W 100	Intro Soc Welfare	3
S W 200	Intro Soc Wrk Pract	3
SOCI 101S	Introduction to Sociology	3
Total Hours		21

Course List

Minimum Required Grade: C-

Economics Requirement

CODE	TITLE	HOURS
Complete one of the following courses:		3
ECNS 101S	Economic Way of Thinking	
ECNS 201S	Principles of Microeconomics	
Total Hours		3

Course List

Minimum Required Grade: C-

Biological Requirement

CODE	TITLE	HOURS
Complete one of the following courses:		3
BIOB 101N	Discover Biology	
PSYX 250N	Fund of Biological Psychology	
Total Hours		3

Course List

Minimum Required Grade: C-

Upper-Division Core Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
S W 300	Hum Behav & Soc Environ	3
S W 310	S W Policy & Services	3
S W 350	S W Interven Meth I	3
S W 360	S W Interven Meth II	3
S W 400	Social Work Research	3
S W 410E	Social Work Ethics	3
S W 464	Cultural Humility in Social Work Practice: Valuing Diversity	3
S W 487	Advanced Practice I	2
S W 488	Advanced Practice II	2
S W 495	Field Work Practicum (2 semesters)	10
Total Hours		35

Course List

Minimum Required Grade: C-

Gerontology Minor < University of Montana

Gerontology Minor

- Overview
- Requirements

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

College of Health Professions and Biomedical Sciences

Degree Specific Credits: 21-23

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Summary

CODE	TITLE	HOURS
Core Courses		12
Integrating Courses		3
Practicum Courses		3-5
Gerontology Electives		3
Total Hours		21-23

Course List

Core Courses

Note:These courses provide students with a common knowledge base through an introduction to gerontology and study of three core areas: social aspects, psychological aspects, and health aspects of aging.

CODE	TITLE	HOURS
Complete all of the following courses:		
AHHS 325	Introduction to Gerontology	3
AHHS 430	Health Aspects of Aging	3
PSYX 233	Fund of Psychology of Aging	3
S W 455	Social Gerontology	3
Total Hours		12

Course List

Minimum Required Grade: C-

Integrating Courses

Notes: In each of the following majors, a course has been identified that will integrate the core course content with information and concepts within the major. A similar course will be identified in other majors not listed here.

Nursing students can also take NRSG 377 through Montana State University with approval by advisor.

CODE	TITLE	HOURS
Complete one of the following courses:		3
CSD 365	Acquired Speech and Language Disorders (for Communication Sciences & Disorders majors)	
KIN 483	Exercise Disease & Aging (for Health and Human Performance majors)	
PHAR 451	Therapeutics I (for Pharmacy majors)	
P T 520	Development Through the Life Span (for Physical Therapy majors)	
SOCI 332	Sociology of the Family (for Psychology, Sociology, and Women's and Gender Studies majors)	
S W 300	Hum Behav & Soc Environ (for Social Work majors)	
Total Hours		3

Course List

Minimum Required Grade: C-

Practicum Courses

Notes: The courses provide experience working with both well and/or frail older persons.

Nursing students can also take NRSG 454 through Montana State University with approval by advisor.

Students in majors that do not have access to a practicum course can enroll in AHHS 395 for up to 3 credits of service learning experience compatible with the student's major and interests.

CODE	TITLE	HOURS
Complete at least 3 credits from the following courses:		3-5
AHHS 395	Geriatric Practicum (for Communicative Sciences & Disorders majors)	
KIN 498	Internship (for Health & Human Performance majors)	
PHAR 585	Geriatric APPE (for Pharmacy majors)	
P T 583 & P T 584	Integrated Clinical Experience I and Integrated Clinical Experience II (for Physical Therapy majors)	
PSYX 398	Internship (for Psychology majors)	
or PSYX 298	Internship	
S W 398	Internship (for Social Work majors)	
or S W 495	Field Work Practicum	
SOCI 498	Internship (for Sociology majors)	
WGSS 398	Coop Education/Internship (for Women s & Gender Studies majors)	
Total Hours		3-5

Course List

Minimum Required Grade: C-

Gerontology Electives

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.

CODE	TITLE	HOURS
Complete one of the following courses:		3
AHHS 327	MGS Meeting	
AHHS 420	Geriatric Health Issues	
AHHS 491	Special Topics (Geriatric Healthcare)	
AHMS 270E	Medical Ethics	
ANTY 426	Culture, Health and Healing	
COMX 485	Communication and Health	
PHAR 320	Am Ind Health Issues	
PHL 321E	Philosophy & Biomedical Ethics	
PSYX 280	Fund of Memory and Cognition	
PSYX 348	Psychology of Family Violence	
S W 475	Death, Dying and Grief	
SOCI 332	Sociology of the Family	
SOCI 491	Special Topics (Sociology of Health & Illness)	
Total Hours		3

Course List

Minimum Required Grade: C-

School of Speech, Language, Hearing, and Occupational Sciences < University of Montana

School of Speech, Language, Hearing, and Occupational Sciences

- Overview
- Programs

Julie Wolter, 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.

Undergraduate Degree

- Communicative Sciences and Disorders B.A.

Undergraduate Minor

- Communicative Sciences and Disorders Minor

Undergraduate Certificate

- Speech Language Pathology/Audiology Assistant Certificate

Communicative Sciences and Disorders B.A. < University of Montana

Communicative Sciences and Disorders B.A.

Bachelor of Arts - Communicative Sciences & Disorders

College of Health Professions and Biomedical Sciences

Degree Specific Credits: 64-68

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

CODE	TITLE	HOURS
Lower-Division Core Courses		22
Upper-Division Core Courses		24
Degree Electives		18-22
Biological Science Requirement		
Physical Science Requirement		
Statistics Requirement		
Psychology Requirement		
Modern and Classical Language Requirement		
Total Hours		64-68

Course List

Lower-Division Core Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
CSD 110	The Field of CSD	3
CSD 210	Speech & Lang Devel	3
CSD 221N	Fundamentals of Acoustics	3
CSD 222	Intro to Audiology	3
LING 270S	Intro to Linguistics	3
PSYX 100S	Intro to Psychology	3
PSYX 120	Introduction to Psychological Research Methods	3
Total Hours		21

Course List

Minimum Required Grade: C-

Upper-Division Core Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
BIOH 330	Anat & Phys Speech Mech	3
CSD 320	Phono Devel & Phonetics	3
CSD 365	Acquired Speech and Language Disorders	3
CSD 405	The Clinical Process	3
CSD 420	Speech Science	3
CSD 430	Senior Capstone	3
CSD 450	Intro to Aural Rehabilitation	3
CSD 460	Language Assessment and Intervention for Children Birth to Preschool	3
Total Hours		24

Course List

Minimum Required Grade: C-

Degree Electives

Rule: Complete the following subcategories.

Biological Science Requirement

CODE	TITLE	HOURS
Complete one of the following courses:		3-4
BIOB 101N	Discover Biology	
BIOB 160N & BIOB 161N	Principles of Living Systems and Prncpls of Living Systems Lab	
Total Hours		3-4

Course List

Minimum Required Grade: C-

Physical Science Requirement

Note: Student may take another physical science course with the approval of the department.

CODE	TITLE	HOURS
Complete one chemistry or physics course, which must be a minimum of 3 credits.		3
Total Hours		3

Course List

Statistics Requirement

CODE	TITLE	HOURS
Complete one of the following courses:		3-4
PSYX 222	Psychological Statistics	
SOCI 202	Social Statistics	
STAT 216	Introduction to Statistics	
Total Hours		3-4

Course List

Minimum Required Grade: C-

Psychology Requirement

CODE	TITLE	HOURS
Complete one of the following courses:		
PSYX 230	Developmental Psychology	3
or PSYX 233	Fund of Psychology of Aging	
Total Hours		3

Course List

Minimum Required Grade: C-

Modern and Classical Language Requirement

CODE	TITLE	HOURS
Compete the University of Montana general education Modern and Classical Language requirement.		4-8
Total Hours		4-8

Course List

Minimum Required Grade: C-

Communicative Sciences and Disorders Minor < University of Montana

Communicative Sciences and Disorders Minor

Minor - Communicative Sciences & Disorders

Phyllis J. Washington College of Education and Human Sciences

Degree Specific Credits: 18

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Summary

CODE	TITLE	HOURS
Core Courses		12
Minor Electives		6

Course List

Core Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
CSD 110	The Field of CSD	3
CSD 210	Speech & Lang Devel	3
CSD 222	Intro to Audiology	3
LING 270S	Intro to Linguistics	3
Total Hours		12

Course List

Minimum Required Grade: C-

Minor Electives

CODE	TITLE	HOURS
Complete 6 credits from the following courses:		6
CSD 320	Phono Devel & Phonetics	
CSD 365	Acquired Speech and Language Disorders	
CSD 460	Language Assessment and Intervention for Children Birth to Preschool	
CSD 466	Acq Cogn Comm Disorders	
Total Hours		6

Course List

Minimum Required Grade: C-

Speech Language Pathology/Audiology Assistant Certificate < University of Montana

Speech Language Pathology/Audiology Assistant Certificate

Post-Secondary Certificate - Speech Language Pathology/Audiology Assistant

College of Health Professions and Biomedical Sciences

Degree Specific Credits: 33-38

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Summary

CODE	TITLE	HOURS
Lower-Division Courses		10-11
Upper-Division Courses		23-27
Total Hours		33-38

Course List

Lower-Division Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
CSD 110	The Field of CSD	3
CSD 205	Clinical Application and Observations in Speech-Language Pathology and Audiology	1-2
CSD 210	Speech & Lang Devel	3
CSD 222	Intro to Audiology	3
Total Hours		10-11

Course List

Minimum Required Grade: C-

Upper-Division Courses

CODE	TITLE	HOURS
CSD 320	Phono Devel & Phonetics	3
CSD 331	Neuroanatomy & Physiology	3
CSD 361	Introduction to Speech-Language Pathology/Audiology Assistants	2
CSD 365	Acquired Speech and Language Disorders	3
CSD 405	The Clinical Process	3
CSD 420	Speech Science	3
CSD 450	Intro to Aural Rehabilitation	3
CSD 460	Language Assessment and Intervention for Children Birth to Preschool	3
CSD 461	Advanced Methods for Speech-Language Pathology/Audiology Assistants	3
Total Hours		26

Course List

Minimum Required Grade: C-

Health Sciences < University of Montana

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

CODE	TITLE	HOURS
AHHS 191	Special Topics	1-6
AHHS 291	Special Topics	1-6
AHHS 325	Introduction to Gerontology	3
AHHS 327	MGS Meeting	1
AHHS 389	Rec Adv in Clin Med	1
AHHS 390	Research	1-4
AHHS 391	Special topics	1-12
AHHS 394	Medical Preparation	2
AHHS 395	Geriatric Practicum	1-3
AHHS 420	Geriatric Health Issues	3
AHHS 430	Health Aspects of Aging	3
AHHS 490	Research	1-4
AHHS 491	Special Topics	1-12

Course List

Anthropology

CODE	TITLE	HOURS
ANTY 211N	Anthropological Genetics	3
ANTY 333	Culture and Population	3
ANTY 426	Culture, Health and Healing	3

Course List

Economics

CODE	TITLE	HOURS
ECNS 310	Intro Health Economics	3

Course List

Health and Human Performance

CODE	TITLE	HOURS
NUTR 221N	Basic Human Nutrition	3

Course List

Microbiology

CODE	TITLE	HOURS
BIOM 250N	Microbiology for Hlth Sciences	3
BIOM 251	Microbiology Hlth Sciences Lab	1

Course List

Social Work

CODE	TITLE	HOURS
S W 423	Addiction Studies	3
S W 455	Social Gerontology	3

Course List

Pharmacy

CODE	TITLE	HOURS
PHAR 110N	Use & Abuse of Drugs	3
PHAR 320	Am Ind Health Issues	3

Course List

Philosophy

CODE	TITLE	HOURS
PHL 321E	Philosophy & Biomedical Ethics	3

Course List

Pre-Medical Sciences < University of Montana

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 inclusive, non-judgmental 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 prior to graduation and 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, even though many schools are changing to a more holistic approach to admissions. 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.

Besides academic accomplishments and admission exam scores, acceptance by a professional school is also dependent upon letters of recommendation, volunteer experience, job shadowing, undergraduate research, 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.

College of Humanities and Sciences < University of Montana

College of Humanities and Sciences

Jenny McNulty, Interim Dean

Julie Baldwin, Associate Dean

John Douglas, Associate Dean

The College of Humanities and Sciences 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.

African-American Studies < University of Montana

African-American Studies

- Overview
- Programs

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.

Students graduate from this program prepared for exciting careers in social justice advocacy, law, social services, entertainment, business, athletics, and any position that requires sharp analytical skills and the ability to speak with sophistication and nuance about this country s racial divisions.

Undergraduate

- African-American Studies B.A.
- African-American Studies Certificate

Undergraduate Minors

- African-American Studies Minor

African-American Studies B.A. < University of Montana

African-American Studies B.A.

Bachelor of Arts - African-American Studies

College of Humanities & Sciences

Degree Specific Credits: 36

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

CODE	TITLE	HOURS
Core Courses		15
Elective Courses		18
Capstone		3
Total Hours		36

Course List

Core Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
AAST 141H	Black: From Africa to Hip-Hop	3
ANTY 122S	Race and Minorities	3
HSTA 342H	Afr Amer Hist to 1865	3
or HSTA 343H	Afr Amer Hist Since 1865	
SOCI 220S	Race, Gender & Class	3
SOCI 325	Social Stratification	3
Total Hours		15

Course List

Minimum Required Grade: C-

Elective Courses

Rule: At least 6 credits of the 18 credits of elective courses must be upper-division (300- or 400-level).

CODE	TITLE	HOURS

CODE	TITLE	HOURS
Complete 18 credits (including at least 6 upper-division credits) from the following courses:		18
AASC 291	Special Topics	
AAST 208H	Africa: From Ancient Egypt to Apartheids Origin	
ANTY 330X	Peoples and Cultures of World	
ANTY 349	Social Change	
CRWR 491	Special Topics	
ECNS 217X	Issues in Economic Development	
ECNS 312	Labor Economics	
FILM 484	Film Directors	
FRCH 339	Surv African Cinema	
GPHY 141S	Geography of World Regions	
GPHY 243	Africa	
HSTA 342H	Afr Amer Hist to 1865 (only if not used to complete the core requirement)	
HSTA 343H	Afr Amer Hist Since 1865 (only if not used to complete the core requirement)	
HSTA 347	Voodoo, Muslim, Church: Black Religion	
HSTA 361	The American South	
HSTA 382H	History of American Law	
HSTA 391	Special Topics	
HSTA 415	The Black Radical Tradition	
HSTA 417	Prayer & Civil Rights	
HSTA 491	Special topics	
HSTR 262H	Islamic Civil: Classical Age	
LIT 191	Special Topics	
LIT 291	Special Topics	
LIT 304	U.S. Writers of Color	
LIT 343	African American Lit	
LIT 391	Special Topics	
LIT 420	Critical Theory	
LIT 491	Special Topics	
MUSI 130L	History of Jazz	
PSCI 326	Politics of Africa	

CODE	TITLE	HOURS
PSCI 348	US Multicultural Politics	
PSCI 443	Politics of Social Movements	
SOCI 441	Capstone: Inequal and Soc Just	
SOCI 443	Sociology of Poverty	
WGSS 363	Feminist Theory and Methods	
Total Hours		18

Course List

Minimum Required Grade: C-

Capstone

Rule: Each student must also complete a 3-credit capstone project as an independent study in which they conduct a research project, service project, activist/organizing project, or artistic project focused on an issue pertinent to the African-American community. All projects must be approved by the African-American Studies director.

CODE	TITLE	HOURS
Complete the following course:		
AAST 499	Capstone/Thesis	3
Total Hours		3

Course List

Minimum Required Grade: C-

African American Studies Certificate < University of Montana

African American Studies Certificate

Post-secondary Certificate - African American Studies

College of Humanities & Sciences

Degree Specific Credits: 15

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Summary

CODE	TITLE	HOURS
Core Courses		6
Electives		9
Total Hours		15

Course List

Core Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
AAST 141H	Black: From Africa to Hip-Hop	3
HSTA 342H	Afr Amer Hist to 1865	3
or HSTA 343H	Afr Amer Hist Since 1865	
Total Hours		6

Course List

Minimum Required Grade: C-

Electives

CODE	TITLE	HOURS
Complete 9 credits of the following courses:		9
AAST 208H	Africa: From Ancient Egypt to Apartheids Origin	
ANTY 122S	Race and Minorities	
FRCH 339	Surv African Cinema	
GPHY 243	Africa	
HSTA 342H	Afr Amer Hist to 1865 (only if not completing the core requirement)	
HSTA 343H	Afr Amer Hist Since 1865 (only if not completing the core requirement)	
HSTA 344	African-American Struggle for Equality	
HSTA 347	Voodoo, Muslim, Church: Black Religion	
HSTA 361	The American South	
HSTA 415	The Black Radical Tradition	
HSTA 417	Prayer & Civil Rights	
LIT 343	African American Lit	
SOCI 220S	Race, Gender & Class	
SOCI 325	Social Stratification	
SOCI 443	Sociology of Poverty	

Course List

Minimum Required Grade: C-

African-American Studies Minor < University of Montana

African-American Studies Minor

Minor - African-American Studies

College of Humanities & Sciences

Degree Specific Credits: 27

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Summary

CODE	TITLE	HOURS
African-American Studies Core Courses		6
African-American Studies Electives		9
Other Electives		12
Total Hours		27

Course List

African-American Studies Core Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
AAST 141H	Black: From Africa to Hip-Hop	3
HSTA 342H	Afr Amer Hist to 1865	3
or HSTA 343H	Afr Amer Hist Since 1865	
Total Hours		6

Course List

Minimum Required Grade: C-

African-American Studies Electives

CODE	TITLE	HOURS
Complete 9 credits from the following courses, of which at least 3 credits must be upper-division:		9
AAST 208H	Africa: From Ancient Egypt to Apartheids Origin	
AAST 291	Special Topics	
AAST 491	Special Topics	
HSTA 342H	Afr Amer Hist to 1865 (only if not used to complete the core requirement)	
HSTA 343H	Afr Amer Hist Since 1865 (only if not used to complete the core requirement)	
HSTA 347	Voodoo, Muslim, Church: Black Religion	
HSTA 415	The Black Radical Tradition	
HSTA 417	Prayer & Civil Rights	
Total Hours		9

Course List

Minimum Required Grade: C-

Other Electives

Rule: At least two courses must be from different disciplines.

CODE	TITLE	HOURS
Complete 12 credits of the following courses:		12
ANTY 122S	Race and Minorities	
ANTY 330X	Peoples and Cultures of World	
ANTY 349	Social Change	
ECNS 217X	Issues in Economic Development	
FRCH 391	Special Topics (must be African-American Literature)	
GPHY 243	Africa	
HSTA 361	The American South	
HSTA 382H	History of American Law	
HSTR 262H	Islamic Civil: Classical Age	
LIT 343	African American Lit	
LIT 420	Critical Theory	
MUSI 130L	History of Jazz	
PSCI 326	Politics of Africa	
SOCI 220S	Race, Gender & Class	
SOCI 325	Social Stratification	
SOCI 443	Sociology of Poverty	
Total Hours		12

Course List

Minimum Required Grade: C-

Anthropology

- Overview
- Programs

Doug 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 humanities. The primary educational mission of the Department of Anthropology is teaching, research, and professional service in order to impart the critical importance of understanding the human condition and its relevance 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 also 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 concentrations or specializations available at every level. For undergraduates, the B.A. can include concentrations 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.

Undergraduate

- Anthropology B.A.
- Anthropology B.A., Archaeology Concentration
- Anthropology B.A., Cultural and Ethnic Diversity Concentration
- Anthropology B.A., Forensic Anthropology Concentration
- Anthropology B.A., Linguistics Concentration
- Anthropology B.A., Medical Anthropology Concentration
- Linguistics B.A.

Undergraduate Minors

- Anthropology Minor
- Linguistics Minor
- International Development Studies Minor

Undergraduate Certificates

- Forensic Studies Certificate
- Historic Preservation Certificate

Anthropology B.A. < University of Montana

Anthropology B.A.

- Overview
- Requirements

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.

Bachelor of Arts - Anthropology

College of Humanities & Sciences

Degree Specific Credits: 39

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: There are no prerequisites to the undergraduate major. The major requires 36 credits in Anthropology, Linguistics, or Native American Studies, 12 of which must be the core offerings. In addition to the core courses, students are required to have a course in statistics. Students must complete the core courses and the statistics course with a letter grade of C- or better.

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

CODE	TITLE	HOURS
Lower-Division Core Courses		12
Statistics Requirement		3
Subarea I - Theory and Methods		6
Anthropological Theory		
Anthropological Methods		
Subarea II, III, IV		6
Subarea II: Human Adaptation and Diversity		
Subarea III: World Societies and Cultures		
Subarea IV: Concepts and Issues		
Anthropology or Linguistics Electives		12
Total Hours		39

Course List

Lower-Division Core Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
ANTY 210N	Intro to Physical Anthropology	3
ANTY 220S	Culture & Society	3
ANTY 250S	Intro to Archaeology	3
LING 270S	Intro to Linguistics	3
Total Hours		12

Course List

Minimum Required Grade: C-

Statistics Requirement

CODE	TITLE	HOURS
Complete one of the following courses:		3
ANTY 401	Anthropological Data Analysis	
ECNS 403	Introduction to Econometrics	
PSYX 222	Psychological Statistics	
SOCI 202	Social Statistics	
STAT 216	Introduction to Statistics	
FORS 201	Forest Biometrics	

Course List

Minimum Required Grade: C-

Subarea I - Theory and Methods

Rule: Complete 3 credits in Theory and 3 credits in Methods: 6 total credits required.

Anthropological Theory

CODE	TITLE	HOURS
Complete 3 credits of the following courses:		3
ANTY 312	Human Evolution	
ANTY 400	History of Anthropology	
ANTY 403	Public Anthropology	
ANTY 404	Anthropological Museology	
ANTY 415	Emergence Modern Humans	
ANTY 430	Social Anthropology	
ANTY 450	Archaeological Theory	
ANTY 456	Historical Archaeology	
ANTY 458	Arch of Hunter-Gatherers	
LING 470	Linguistic Analysis	
Total Hours		3

Course List

Minimum Required Grade: C-

Anthropological Methods

CODE	TITLE	HOURS
Complete 3 credits of the following courses:		3
ANTY 402	Quan Ethnographic Field Methds	
ANTY 408	Advanced Anthro Statistics	
ANTY 412	Osteology	
ANTY 413	Forensic and Mortuary Arch	
ANTY 416	Dental Anthropology	
ANTY 418	Evolution and Genetic Variation in Human Populations	
ANTY 431	Ethnographic Field Methods	
ANTY 451	Cultural Resource Management	
ANTY 454	Lithic Technology	
ANTY 455	Artifact Analysis	
ANTY 466	Archaeological Survey	
ANTY 467	Archaeological Field School	
ANTY 476	Methods for Native Languages	
ANTY 495	Field Experience:	
LING 474	Historical Linguistics	
LING 475	Linguistic Field Methods	
Total Hours		3

Course List

Minimum Required Grade: C-

Subarea II, III, IV

Rule: Complete 6 credits from 2 of 3 subareas: 6 total credits required.

Subarea II: Human Adaptation and Diversity

CODE	TITLE	HOURS
Complete 3 credits of the following courses:		3
ANTY 104	Ancient Migrations	
ANTY 122S	Race and Minorities	
ANTY 133X	Food and Culture	
ANTY 211N	Anthropological Genetics	
ANTY 310	Human Variation	
ANTY 333	Culture and Population	
ANTY 418	Evolution and Genetic Variation in Human Populations	
ANTY 426	Culture, Health and Healing	
LING 375X	Linguistic Ecology and Language Endangerment	
Total Hours		3

Course List

Minimum Required Grade: C-

Subarea III: World Societies and Cultures

CODE	TITLE	HOURS
Complete 3 credits of the following courses:		3
ANTY 102H	Intro to South & S. East Asia	
ANTY 141H	The Silk Road	
ANTY 150X	Archaeology of Yellowstone: 11,000 Years of Native Americans in Yellowstone National Park	
ANTY 241H	Central Asian Culture and Civ	
ANTY 251H	Foundations of Civilization	
ANTY 254H	Arch Wonders of the World	
ANTY 323X	Native Peoples of Montana	
ANTY 330X	Peoples and Cultures of World	
ANTY 351H	Archaeology of North America	
ANTY 352X	Archaeology of Montana	
ANTY 353	PaleoIndian Archaeology	
ANTY 354H	Mesoamerican Prehistory	
ANTY 442	Cities/Landscapes Central Asia	
ANTY 444	Artistic Tradtns Central Asia	
ANTY 457	Arch of the Pacific Northwest	
ANTY 459	Archof the Arctic/Subarctic	
ANTY 465	Arch of the SW United States	
ANTY 494	Seminar/Workshop	
Total Hours		3

Course List

Minimum Required Grade: C-

Subarea IV: Concepts and Issues

CODE	TITLE	HOURS
Complete 3 credits of the following courses:		3
ANTY 126	Anthropology and Global Health	
ANTY 216	Primates in Peril	
ANTY 314	Principles of Forensic Anthro	
ANTY 326E	Indigenous Peoples & the Ethics of Development	
ANTY 336	Myth, Ritual and Religion	
ANTY 349	Social Change	
ANTY 422	Mind, Culture and Society	
ANTY 423	Culture and Identity	
ANTY 427	Anthropology of Gender	
ANTY 435	Drugs, Culture and Society	
ANTY 440	Cont. Issues of SSEA	
LING 473	Language and Culture	
LING 477	Bilingualism	
LING 484	NA Indigenous Lang & Ling	
LING 489	Morphology	
NASX 306X	Contemp Global Iss Indg People	
Total Hours		3

Course List

Minimum Required Grade: C-

Anthropology or Linguistics Electives

Rule: Complete 12 credits in Anthropology and Linguistics electives not completing core or subarea requirements. 12 total credits required.

Minimum Required Grade: C-

University Of Montana

Anthropology B.A. - Archaeology

Bachelor of Arts - Anthropology; Archaeology Concentration

College of Humanities & Sciences

Degree Specific Credits: 36-60

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: For a degree in Anthropology with a concentration in Archaeology, students must complete all the general major requirements, including a total of nine credits of Archaeology Concentration core requirements and 12 credits in Archaeology electives. Note that in addition to fulfilling concentration requirements, ANTY courses also fulfill certain major requirements.

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

Course List		
CODE	**TITLE**	**HOURS**
Lower-Division Core Courses		12
Statistics Requirement		3
Subarea I - Theory and Methods		6
Anthropological Theory		
Anthropological Methods		
Subarea II, III, IV		6
Subarea II: Human Adaptation and Diversity		
Subarea III: World Societies and Cultures		
Subarea IV: Concepts and Issues		
Anthropology and Linguistics Electives		12
Archaeology Concentration Core Courses		9
Area		
Theory		
Methods		
Archaeology Allied Science Electives		12
Total Hours		60

Lower-Division Core Courses

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
ANTY 210N	Intro to Physical Anthropology	3
ANTY 220S	Culture & Society	3
ANTY 250S	Intro to Archaeology	3
LING 270S	Intro to Linguistics	3
Total Hours		12

Minimum Required Grade: C-

Statistics Requirement

Course List		
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		3
ANTY 401	Anthropological Data Analysis	
ECNS 403	Introduction to Econometrics	
PSYX 222	Psychological Statistics	
SOCI 202	Social Statistics	
STAT 216	Introduction to Statistics	
FORS 201	Forest Biometrics	

Minimum Required Grade: C-

Subarea I - Theory and Methods

Rule: Complete 3 credits in Theory and 3 credits in Methods: 6 total credits required.

Anthropological Theory

Course List		
CODE	**TITLE**	**HOURS**
Complete 3 credits of the following courses:		3
ANTY 312	Human Evolution	
ANTY 400	History of Anthropology	
ANTY 403	Public Anthropology	
ANTY 404	Anthropological Museology	
ANTY 415	Emergence Modern Humans	
ANTY 430	Social Anthropology	
ANTY 450	Archaeological Theory	
ANTY 456	Historical Archaeology	
ANTY 458	Arch of Hunter-Gatherers	
LING 470	Linguistic Analysis	
Total Hours		3

Minimum Required Grade: C-

Anthropological Methods

Course List		
CODE	**TITLE**	**HOURS**
Complete 3 credits of the following courses:		3
ANTY 402	Quan Ethnographic Field Methds	
ANTY 408	Advanced Anthro Statistics	
ANTY 412	Osteology	
ANTY 413	Forensic and Mortuary Arch	
ANTY 416	Dental Anthropology	
ANTY 418	Evolution and Genetic Variation in Human Populations	
ANTY 431	Ethnographic Field Methods	
ANTY 451	Cultural Resource Management	
ANTY 454	Lithic Technology	
ANTY 455	Artifact Analysis	
ANTY 466	Archaeological Survey	
ANTY 467	Archaeological Field School	
ANTY 476	Methods for Native Languages	
ANTY 495	Field Experience:	
LING 474	Historical Linguistics	
LING 475	Linguistic Field Methods	
Total Hours		3

Minimum Required Grade: C-

Subarea II, III, IV

Rule: Complete 6 credits from 2 of 3 subareas: 6 total credits required.

Subarea II: Human Adaptation and Diversity

Course List		
CODE	**TITLE**	**HOURS**
Complete 3 credits of the following courses:		3
ANTY 104	Ancient Migrations	
ANTY 122S	Race and Minorities	
ANTY 133X	Food and Culture	
ANTY 211N	Anthropological Genetics	
ANTY 310	Human Variation	
ANTY 333	Culture and Population	
ANTY 418	Evolution and Genetic Variation in Human Populations	
ANTY 426	Culture, Health and Healing	
LING 375X	Linguistic Ecology and Language Endangerment	
Total Hours		3

Minimum Required Grade: C-

Subarea III: World Societies and Cultures

Course List		
CODE	**TITLE**	**HOURS**
Complete 3 credits of the following courses:		3
ANTY 102H	Intro to South & S. East Asia	
ANTY 141H	The Silk Road	
ANTY 150X	Archaeology of Yellowstone: 11,000 Years of Native Americans in Yellowstone National Park	
ANTY 241H	Central Asian Culture and Civ	
ANTY 251H	Foundations of Civilization	
ANTY 254H	Arch Wonders of the World	
ANTY 323X	Native Peoples of Montana	
ANTY 330X	Peoples and Cultures of World	
ANTY 351H	Archaeology of North America	
ANTY 352X	Archaeology of Montana	
ANTY 353	PaleoIndian Archaeology	
ANTY 354H	Mesoamerican Prehistory	
ANTY 442	Cities/Landscapes Central Asia	
ANTY 444	Artistic Tradtns Central Asia	
ANTY 457	Arch of the Pacific Northwest	
ANTY 459	Archof the Arctic/Subarctic	
ANTY 465	Arch of the SW United States	
ANTY 494	Seminar/Workshop	
Total Hours		3

Minimum Required Grade: C-

Subarea IV: Concepts and Issues

Course List		
CODE	**TITLE**	**HOURS**
Complete 3 credits of the following courses:		3
ANTY 126	Anthropology and Global Health	
ANTY 216	Primates in Peril	
ANTY 314	Principles of Forensic Anthro	
ANTY 326E	Indigenous Peoples & the Ethics of Development	
ANTY 336	Myth, Ritual and Religion	
ANTY 349	Social Change	
ANTY 422	Mind, Culture and Society	
ANTY 423	Culture and Identity	
ANTY 427	Anthropology of Gender	
ANTY 435	Drugs, Culture and Society	
ANTY 440	Cont. Issues of SSEA	
LING 473	Language and Culture	
LING 477	Bilingualism	
LING 484	NA Indigenous Lang & Ling	
LING 489	Morphology	
NASX 306X	Contemp Global Iss Indg People	
Total Hours		3

Minimum Required Grade: C-

Anthropology and Linguistics Electives

Rule: Complete 12 credits in Anthropology and Linguistics electives not completing core or subarea requirements. 12 total credits required.

Minimum Required Grade: C-

Archaeology Core Courses

Rule: Complete one course from each of the 3 Archaeology Core Course subcategories: Area, Theory, and Methods. 9 total credits required.

Area

Course List		
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		3
ANTY 351H	Archaeology of North America	
ANTY 352X	Archaeology of Montana	
ANTY 353	PaleoIndian Archaeology	
ANTY 354H	Mesoamerican Prehistory	
ANTY 451	Cultural Resource Management	
ANTY 457	Arch of the Pacific Northwest	
ANTY 459	Archof the Arctic/Subarctic	
ANTY 465	Arch of the SW United States	
Total Hours		3

Minimum Required Grade: C-

Theory

Course List		
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		3
ANTY 450	Archaeological Theory	
ANTY 456	Historical Archaeology	
ANTY 458	Arch of Hunter-Gatherers	
Total Hours		3

Minimum Required Grade: C-

Methods

Course List		
CODE	**TITLE**	**HOURS**
Complete 3 credits from the following courses:		3
ANTY 454	Lithic Technology	
ANTY 455	Artifact Analysis	
ANTY 466	Archaeological Survey	
ANTY 467	Archaeological Field School	
Total Hours		3

Minimum Required Grade: C-

Archaeology Allied Science Electives

Rule: Complete 6 credits in Biology, Geography, or Geology. All 6 credits must be in the same discipline.

Rule: Complete 6 credits in Computer Science, Environmental Studies, Forestry, History, Native American Studies, or Mathematical Sciences. All 6 credits must come from the same discipline.

12 total credits required.

Minimum Required Grade: C-

Anthropology B.A. - Cultural and Ethnic Diversity

Bachelor of Arts - Anthropology; Cultural and Ethnic Diversity Concentration

College of Humanities & Sciences

Degree Specific Credits: 36 - 63

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: For a degree in Anthropology with a concentration in Cultural and Ethnic Diversity, the student must meet all the general requirements for the major, including the four required courses for this concentration (ANTY 122S, ANTY 310, ANTY 423, and ANTY 330X) and 12 credits of concentration electives. Note that in addition to fulfilling concentration requirements, ANTY courses also fulfill certain major requirements.

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

Course List		
CODE	**TITLE**	**HOURS**
Lower-Division Core Courses		12
Statistics Requirement		3
Subarea I - Theory and Methods		6
Anthropological Theory		
Anthropological Methods		
Subarea II, III, IV		6
Subarea II: Human Adaptation and Diversity		
Subarea III: World Societies and Cultures		
Subarea IV: Concepts and Issues		
Anthropology and Linguistics Electives		12
Cultural and Ethnic Diversity Concentration Core Requirements		12
Cultural and Ethnic Diversity Concentration Electives		12
Total Hours		63

Lower-Division Core Courses

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
ANTY 210N	Intro to Physical Anthropology	3
ANTY 220S	Culture & Society	3
ANTY 250S	Intro to Archaeology	3
LING 270S	Intro to Linguistics	3
Total Hours		12

Minimum Required Grade: C-

Statistics Requirement

Course List		
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		3
ANTY 401	Anthropological Data Analysis	
ECNS 403	Introduction to Econometrics	
PSYX 222	Psychological Statistics	
SOCI 202	Social Statistics	
STAT 216	Introduction to Statistics	
FORS 201	Forest Biometrics	

Minimum Required Grade: C-

Subarea I - Theory and Methods

Rule: Complete 3 credits in Theory and 3 credits in Methods: 6 total credits required.

Anthropological Theory

Course List		
CODE	**TITLE**	**HOURS**
Complete 3 credits of the following courses:		3
ANTY 312	Human Evolution	
ANTY 400	History of Anthropology	
ANTY 403	Public Anthropology	
ANTY 404	Anthropological Museology	
ANTY 415	Emergence Modern Humans	
ANTY 430	Social Anthropology	
ANTY 450	Archaeological Theory	
ANTY 456	Historical Archaeology	
ANTY 458	Arch of Hunter-Gatherers	
LING 470	Linguistic Analysis	
Total Hours		3

Minimum Required Grade: C-

Anthropological Methods

Course List		
CODE	**TITLE**	**HOURS**
Complete 3 credits of the following courses:		3
ANTY 402	Quan Ethnographic Field Methds	
ANTY 408	Advanced Anthro Statistics	
ANTY 412	Osteology	
ANTY 413	Forensic and Mortuary Arch	
ANTY 416	Dental Anthropology	
ANTY 418	Evolution and Genetic Variation in Human Populations	
ANTY 431	Ethnographic Field Methods	
ANTY 451	Cultural Resource Management	
ANTY 454	Lithic Technology	
ANTY 455	Artifact Analysis	
ANTY 466	Archaeological Survey	
ANTY 467	Archaeological Field School	
ANTY 476	Methods for Native Languages	
ANTY 495	Field Experience:	
LING 474	Historical Linguistics	
LING 475	Linguistic Field Methods	
Total Hours		3

Minimum Required Grade: C-

Subarea II, III, IV

Rule: Complete 6 credits from 2 of 3 subareas: 6 total credits required.

Subarea II: Human Adaptation and Diversity

Course List		
CODE	**TITLE**	**HOURS**
Complete 3 credits of the following courses:		3
ANTY 104	Ancient Migrations	
ANTY 122S	Race and Minorities	
ANTY 133X	Food and Culture	
ANTY 211N	Anthropological Genetics	
ANTY 310	Human Variation	
ANTY 333	Culture and Population	
ANTY 418	Evolution and Genetic Variation in Human Populations	
ANTY 426	Culture, Health and Healing	
LING 375X	Linguistic Ecology and Language Endangerment	
Total Hours		3

Minimum Required Grade: C-

Subarea III: World Societies and Cultures

Course List		
CODE	**TITLE**	**HOURS**
Complete 3 credits of the following courses:		3
ANTY 102H	Intro to South & S. East Asia	
ANTY 141H	The Silk Road	
ANTY 150X	Archaeology of Yellowstone: 11,000 Years of Native Americans in Yellowstone National Park	
ANTY 241H	Central Asian Culture and Civ	
ANTY 251H	Foundations of Civilization	
ANTY 254H	Arch Wonders of the World	
ANTY 323X	Native Peoples of Montana	
ANTY 330X	Peoples and Cultures of World	
ANTY 351H	Archaeology of North America	
ANTY 352X	Archaeology of Montana	
ANTY 353	PaleoIndian Archaeology	
ANTY 354H	Mesoamerican Prehistory	
ANTY 442	Cities/Landscapes Central Asia	
ANTY 444	Artistic Tradtns Central Asia	
ANTY 457	Arch of the Pacific Northwest	
ANTY 459	Archof the Arctic/Subarctic	
ANTY 465	Arch of the SW United States	
ANTY 494	Seminar/Workshop	
Total Hours		3

Minimum Required Grade: C-

Subarea IV: Concepts and Issues

Course List		
CODE	**TITLE**	**HOURS**
Complete 3 credits of the following courses:		3
ANTY 126	Anthropology and Global Health	
ANTY 216	Primates in Peril	
ANTY 314	Principles of Forensic Anthro	
ANTY 326E	Indigenous Peoples & the Ethics of Development	
ANTY 336	Myth, Ritual and Religion	
ANTY 349	Social Change	
ANTY 422	Mind, Culture and Society	
ANTY 423	Culture and Identity	
ANTY 427	Anthropology of Gender	
ANTY 435	Drugs, Culture and Society	
ANTY 440	Cont. Issues of SSEA	
LING 473	Language and Culture	
LING 477	Bilingualism	
LING 484	NA Indigenous Lang & Ling	
LING 489	Morphology	
NASX 306X	Contemp Global Iss Indg People	
Total Hours		3

Minimum Required Grade: C-

Anthropology and Linguistics Electives

Rule: Complete 12 credits in Anthropology and Linguistics electives not completing core or subarea requirements. 12 total credits required.

Minimum Required Grade: C-

Cultural and Ethnic Diversity Concentration Requirements

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
ANTY 122S	Race and Minorities	3
ANTY 310	Human Variation	3
ANTY 330X	Peoples and Cultures of World	3
ANTY 423	Culture and Identity	3
Total Hours		12

Minimum Required Grade: C-

Cultural and Ethnic Diversity Concentration Electives

Rule: Complete 6 credits of advisor approved electives in Anthropology, History, or Sociology. Please see your advisor about which courses may fulfill this requirement.

Rule: Complete 6 credits of advisor approved electives in African-American Studies, Asian Studies, Native American Studies, or Women's Studies. Please see your advisor about which courses may fulfill this requirement.

12 total credits required.

Minimum Required Grade: C-

Anthropology B.A. - Forensic Anthropology < University of Montana

Anthropology B.A. - Forensic Anthropology

Bachelor of Arts - Anthropology; Forensic Anthropology Concentration

College of Humanities & Sciences

Degree Specific Credits: 36-66

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: For a degree in Anthropology with a concentration in Forensic Anthropology the student must meet all the general requirements for the major, as well as the Forensic Anthropology Core Courses and electives. Note that in addition to fulfilling concentration requirements, ANTY courses also fulfill major requirements.

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

CODE	TITLE	HOURS
Lower-Division Core Courses		12
Statistics Requirement		3
Subarea I - Theory and Methods		6
Anthropological Theory		
Anthropological Methods		
Subarea II, III, IV		6
Subarea II: Human Adaptation and Diversity		
Subarea III: World Societies and Cultures		
Subarea IV: Concepts and Issues		
Anthropology and Linguistics Electives		12
Forensic Anthropology Concentration		27
Concentration Requirements		
Concentration Electives		
Total Hours		66

Course List

Lower-Division Core Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
ANTY 210N	Intro to Physical Anthropology	3
ANTY 220S	Culture & Society	3
ANTY 250S	Intro to Archaeology	3
LING 270S	Intro to Linguistics	3
Total Hours		12

Course List

Minimum Required Grade: C-

Statistics Requirement

CODE	TITLE	HOURS
Complete one of the following courses:		3
ANTY 401	Anthropological Data Analysis	
ECNS 403	Introduction to Econometrics	
PSYX 222	Psychological Statistics	
SOCI 202	Social Statistics	
STAT 216	Introduction to Statistics	
FORS 201	Forest Biometrics	

Course List

Minimum Required Grade: C-

Subarea I - Theory and Methods

Rule: Complete 3 credits in Theory and 3 credits in Methods: 6 total credits required.

Anthropological Theory

CODE	TITLE	HOURS
Complete 3 credits of the following courses:		3
ANTY 312	Human Evolution	
ANTY 400	History of Anthropology	
ANTY 403	Public Anthropology	
ANTY 404	Anthropological Museology	
ANTY 415	Emergence Modern Humans	
ANTY 430	Social Anthropology	
ANTY 450	Archaeological Theory	
ANTY 456	Historical Archaeology	
ANTY 458	Arch of Hunter-Gatherers	
LING 470	Linguistic Analysis	
Total Hours		3

Course List

Minimum Required Grade: C-

Anthropological Methods

CODE	TITLE	HOURS
Complete 3 credits of the following courses:		3
ANTY 402	Quan Ethnographic Field Methds	
ANTY 408	Advanced Anthro Statistics	
ANTY 412	Osteology	
ANTY 413	Forensic and Mortuary Arch	
ANTY 416	Dental Anthropology	
ANTY 418	Evolution and Genetic Variation in Human Populations	
ANTY 431	Ethnographic Field Methods	
ANTY 451	Cultural Resource Management	
ANTY 454	Lithic Technology	
ANTY 455	Artifact Analysis	
ANTY 466	Archaeological Survey	
ANTY 467	Archaeological Field School	
ANTY 476	Methods for Native Languages	
ANTY 495	Field Experience:	
LING 474	Historical Linguistics	
LING 475	Linguistic Field Methods	
Total Hours		3

Course List

Minimum Required Grade: C-

Subarea II, III, IV

Rule: Complete 6 credits from 2 of 3 subareas: 6 total credits required.

Subarea II: Human Adaptation and Diversity

CODE	TITLE	HOURS
Complete 3 credits of the following courses:		3
ANTY 104	Ancient Migrations	
ANTY 122S	Race and Minorities	
ANTY 133X	Food and Culture	
ANTY 211N	Anthropological Genetics	
ANTY 310	Human Variation	
ANTY 333	Culture and Population	
ANTY 418	Evolution and Genetic Variation in Human Populations	
ANTY 426	Culture, Health and Healing	
LING 375X	Linguistic Ecology and Language Endangerment	
Total Hours		3

Course List

Minimum Required Grade: C-

Subarea III: World Societies and Cultures

CODE	TITLE	HOURS
Complete 3 credits of the following courses:		3
ANTY 102H	Intro to South & S. East Asia	
ANTY 141H	The Silk Road	
ANTY 150X	Archaeology of Yellowstone: 11,000 Years of Native Americans in Yellowstone National Park	
ANTY 241H	Central Asian Culture and Civ	
ANTY 251H	Foundations of Civilization	
ANTY 254H	Arch Wonders of the World	
ANTY 323X	Native Peoples of Montana	
ANTY 330X	Peoples and Cultures of World	
ANTY 351H	Archaeology of North America	
ANTY 352X	Archaeology of Montana	
ANTY 353	PaleoIndian Archaeology	
ANTY 354H	Mesoamerican Prehistory	
ANTY 442	Cities/Landscapes Central Asia	
ANTY 444	Artistic Tradtns Central Asia	
ANTY 457	Arch of the Pacific Northwest	
ANTY 459	Archof the Arctic/Subarctic	
ANTY 465	Arch of the SW United States	
ANTY 494	Seminar/Workshop	
Total Hours		3

Course List

Minimum Required Grade: C-

Subarea IV: Concepts and Issues

CODE	TITLE	HOURS
Complete 3 credits of the following courses:		3
ANTY 126	Anthropology and Global Health	
ANTY 216	Primates in Peril	
ANTY 314	Principles of Forensic Anthro	
ANTY 326E	Indigenous Peoples & the Ethics of Development	
ANTY 336	Myth, Ritual and Religion	
ANTY 349	Social Change	
ANTY 422	Mind, Culture and Society	
ANTY 423	Culture and Identity	
ANTY 427	Anthropology of Gender	
ANTY 435	Drugs, Culture and Society	
ANTY 440	Cont. Issues of SSEA	
LING 473	Language and Culture	
LING 477	Bilingualism	
LING 484	NA Indigenous Lang & Ling	
LING 489	Morphology	
NASX 306X	Contemp Global Iss Indg People	
Total Hours		3

Course List

Minimum Required Grade: C-

Anthropology and Linguistics Electives

CODE	TITLE	HOURS
Complete the following elective credits:		12
Complete 12 credits in Anthropology and Linguistics electives not completing core or subarea requirements.		

Course List

Minimum Required Grade: C-

Forensic Anthropology Concentration Core Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
ANTY 310	Human Variation	3
ANTY 314	Principles of Forensic Anthro	3
CJUS 125N	Fund of Forensic Science	3
SOCI 211S	Introduction to Criminology	3
or SOCI 221	Criminal Justice System	
Complete one of the following courses:		3
ANTY 412	Osteology	
ANTY 413	Forensic and Mortuary Arch	
ANTY 416	Dental Anthropology	
Another approved 400-level course with a lab or field component in physical anthropology, archaeology, non-human osteology, geographic information systems (GIS), subsurface imaging, chemical analysis, genetic/evolutionary analysis, or multivariate statistics.		
Total Hours		15

Course List

Minimum Required Grade: C-

Forensic Anthropology Concentration Electives

CODE	TITLE	HOURS
Complete the following elective credits:		12
Complete 12 credits in courses relevant to the forensic sciences, such as (but not limited to) physical anthropology beyond ANTY 210N, archaeology beyond ANTY 250S, Biology, Chemistry, Criminology, Drawing, Geosciences, Pharmacy, Photography, Public Speaking, or Psychology. Courses in ANTY or LING may count as electives for the anthropology major. Please speak with an advisor in the Anthropology Department about which courses complete this requirement.		

Course List

Minimum Required Grade: C-

Anthropology B.A. - Linguistics < University of Montana

Anthropology B.A. - Linguistics

Bachelor of Arts - Anthropology; Linguistics Concentration

College of Humanities & Sciences

Degree Specific Credits: 36-51

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: For a degree in Anthropology with a concentration in Linguistics the student must meet all the general requirements for the major, in addition to completing the Linguistics Concentration core courses and electives.

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

CODE	TITLE	HOURS
Lower-Division Core Courses		12
Statistics Requirement		3
Subarea I - Theory and Methods		6
Anthropological Theory		
Anthropological Methods		
Subarea II, III, IV		6
Subarea II: Human Adaptation and Diversity		
Subarea III: World Societies and Cultures		
Subarea IV: Concepts and Issues		
Anthropology and Linguistics Electives		12
Linguistics Concentration Requirements		6
Linguistics Concentration Electives		6
Total Hours		51

Course List

Lower-Division Core Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
ANTY 210N	Intro to Physical Anthropology	3
ANTY 220S	Culture & Society	3
ANTY 250S	Intro to Archaeology	3
LING 270S	Intro to Linguistics	3
Total Hours		12

Course List

Minimum Required Grade: C-

Statistics Requirement

CODE	TITLE	HOURS
Complete one of the following courses:		3
ANTY 401	Anthropological Data Analysis	
ECNS 403	Introduction to Econometrics	
PSYX 222	Psychological Statistics	
SOCI 202	Social Statistics	
STAT 216	Introduction to Statistics	
FORS 201	Forest Biometrics	

Course List

Minimum Required Grade: C-

Subarea I - Theory and Methods

Rule: Complete 3 credits in Theory and 3 credits in Methods: 6 total credits required.

Anthropological Theory

CODE	TITLE	HOURS
Complete 3 credits of the following courses:		3
ANTY 312	Human Evolution	
ANTY 400	History of Anthropology	
ANTY 403	Public Anthropology	
ANTY 404	Anthropological Museology	
ANTY 415	Emergence Modern Humans	
ANTY 430	Social Anthropology	
ANTY 450	Archaeological Theory	
ANTY 456	Historical Archaeology	
ANTY 458	Arch of Hunter-Gatherers	
LING 470	Linguistic Analysis	
Total Hours		3

Course List

Minimum Required Grade: C-

Anthropological Methods

CODE	TITLE	HOURS
Complete 3 credits of the following courses:		3
ANTY 402	Quan Ethnographic Field Methds	
ANTY 408	Advanced Anthro Statistics	
ANTY 412	Osteology	
ANTY 413	Forensic and Mortuary Arch	
ANTY 416	Dental Anthropology	
ANTY 418	Evolution and Genetic Variation in Human Populations	
ANTY 431	Ethnographic Field Methods	
ANTY 451	Cultural Resource Management	
ANTY 454	Lithic Technology	
ANTY 455	Artifact Analysis	
ANTY 466	Archaeological Survey	
ANTY 467	Archaeological Field School	
ANTY 476	Methods for Native Languages	
ANTY 495	Field Experience:	
LING 474	Historical Linguistics	
LING 475	Linguistic Field Methods	
Total Hours		3

Course List

Minimum Required Grade: C-

Subarea II, III, IV

Rule: Complete 6 credits from 2 of 3 subareas: 6 total credits required.

Subarea II: Human Adaptation and Diversity

CODE	TITLE	HOURS
Complete 3 credits of the following courses:		3
ANTY 104	Ancient Migrations	
ANTY 122S	Race and Minorities	
ANTY 133X	Food and Culture	
ANTY 211N	Anthropological Genetics	
ANTY 310	Human Variation	
ANTY 333	Culture and Population	
ANTY 418	Evolution and Genetic Variation in Human Populations	
ANTY 426	Culture, Health and Healing	
LING 375X	Linguistic Ecology and Language Endangerment	
Total Hours		3

Course List

Minimum Required Grade: C-

Subarea III: World Societies and Cultures

CODE	TITLE	HOURS
Complete 3 credits of the following courses:		3
ANTY 102H	Intro to South & S. East Asia	
ANTY 141H	The Silk Road	
ANTY 150X	Archaeology of Yellowstone: 11,000 Years of Native Americans in Yellowstone National Park	
ANTY 241H	Central Asian Culture and Civ	
ANTY 251H	Foundations of Civilization	
ANTY 254H	Arch Wonders of the World	
ANTY 323X	Native Peoples of Montana	
ANTY 330X	Peoples and Cultures of World	
ANTY 351H	Archaeology of North America	
ANTY 352X	Archaeology of Montana	
ANTY 353	PaleoIndian Archaeology	
ANTY 354H	Mesoamerican Prehistory	
ANTY 442	Cities/Landscapes Central Asia	
ANTY 444	Artistic Tradtns Central Asia	
ANTY 457	Arch of the Pacific Northwest	
ANTY 459	Archof the Arctic/Subarctic	
ANTY 465	Arch of the SW United States	
ANTY 494	Seminar/Workshop	
Total Hours		3

Course List

Minimum Required Grade: C-

Subarea IV: Concepts and Issues

CODE	TITLE	HOURS
Complete 3 credits of the following courses:		3
ANTY 126	Anthropology and Global Health	
ANTY 216	Primates in Peril	
ANTY 314	Principles of Forensic Anthro	
ANTY 326E	Indigenous Peoples & the Ethics of Development	
ANTY 336	Myth, Ritual and Religion	
ANTY 349	Social Change	
ANTY 422	Mind, Culture and Society	
ANTY 423	Culture and Identity	
ANTY 427	Anthropology of Gender	
ANTY 435	Drugs, Culture and Society	
ANTY 440	Cont. Issues of SSEA	
LING 473	Language and Culture	
LING 477	Bilingualism	
LING 484	NA Indigenous Lang & Ling	
LING 489	Morphology	
NASX 306X	Contemp Global Iss Indg People	
Total Hours		3

Course List

Minimum Required Grade: C-

Anthropology and Linguistics Electives

Rule: Complete 12 credits in Anthropology and Linguistics electives not completing core or subarea requirements. 12 total credits required.

Minimum Required Grade: C-

Linguistics Concentration Requirements

CODE	TITLE	HOURS
Complete all of the following courses:		
LING 470	Linguistic Analysis	3
LING 473	Language and Culture	3
Total Hours		6

Course List

Minimum Required Grade: C-

Linguistics Concentration Electives

CODE	TITLE	HOURS
Complete two of the following courses:		6
LING 375X	Linguistic Ecology and Language Endangerment	
LING 471	Phonetics and Phonology	
LING 472	Syntax	
LING 474	Historical Linguistics	
LING 475	Linguistic Field Methods	
LING 477	Bilingualism	
LING 478	Learner Language	
LING 484	NA Indigenous Lang & Ling	
LING 489	Morphology	
Total Hours		6

Course List

Minimum Required Grade: C-

Anthropology B.A. - Medical Anthropology < University of Montana

Anthropology B.A. - Medical Anthropology

Bachelor of Arts - Anthropology; Medical Anthropology Concentration

College of Humanities & Sciences

Degree Specific Credits: 36-51

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: For a degree in Anthropology with a concentration in Medical Anthropology, the student must meet all of the general requirements for the major, as well as completing the Medical Anthropology Core Courses and Electives. Note that in addition to fulfilling concentration requirements, ANTY courses also fulfill certain major requirements.

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

CODE	TITLE	HOURS
Lower-Division Core Courses		12
Statistics Requirement		3
Subarea I - Theory and Methods		6
Anthropological Theory		
Anthropological Methods		
Subarea II, III, IV		6
Subarea II: Human Adaptation and Diversity		
Subarea III: World Societies and Cultures		
Subarea IV: Concepts and Issues		
Anthropology and Linguistics Electives		12
Medical Anthropology Concentration Requirements		3
Medical Anthropology Concentration Electives		9
Total Hours		51

Course List

Lower-Division Core Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
ANTY 210N	Intro to Physical Anthropology	3
ANTY 220S	Culture & Society	3
ANTY 250S	Intro to Archaeology	3
LING 270S	Intro to Linguistics	3
Total Hours		12

Course List

Minimum Required Grade: C-

Statistics Requirement

CODE	TITLE	HOURS
Complete one of the following courses:		3
ANTY 401	Anthropological Data Analysis	
ECNS 403	Introduction to Econometrics	
PSYX 222	Psychological Statistics	
SOCI 202	Social Statistics	
STAT 216	Introduction to Statistics	
FORS 201	Forest Biometrics	

Course List

Minimum Required Grade: C-

Subarea I - Theory and Methods

Rule: Complete 3 credits in Theory and 3 credits in Methods: 6 total credits required.

Anthropological Theory

CODE	TITLE	HOURS
Complete 3 credits of the following courses:		3
ANTY 312	Human Evolution	
ANTY 400	History of Anthropology	
ANTY 403	Public Anthropology	
ANTY 404	Anthropological Museology	
ANTY 415	Emergence Modern Humans	
ANTY 430	Social Anthropology	
ANTY 450	Archaeological Theory	
ANTY 456	Historical Archaeology	
ANTY 458	Arch of Hunter-Gatherers	
LING 470	Linguistic Analysis	
Total Hours		3

Course List

Minimum Required Grade: C-

Anthropological Methods

CODE	TITLE	HOURS
Complete 3 credits of the following courses:		3
ANTY 402	Quan Ethnographic Field Methds	
ANTY 408	Advanced Anthro Statistics	
ANTY 412	Osteology	
ANTY 413	Forensic and Mortuary Arch	
ANTY 416	Dental Anthropology	
ANTY 418	Evolution and Genetic Variation in Human Populations	
ANTY 431	Ethnographic Field Methods	
ANTY 451	Cultural Resource Management	
ANTY 454	Lithic Technology	
ANTY 455	Artifact Analysis	
ANTY 466	Archaeological Survey	
ANTY 467	Archaeological Field School	
ANTY 476	Methods for Native Languages	
ANTY 495	Field Experience:	
LING 474	Historical Linguistics	
LING 475	Linguistic Field Methods	
Total Hours		3

Course List

Minimum Required Grade: C-

Subarea II, III, IV

Rule: Complete 6 credits from 2 of 3 subareas: 6 total credits required.

Subarea II: Human Adaptation and Diversity

CODE	TITLE	HOURS
Complete 3 credits of the following courses:		3
ANTY 104	Ancient Migrations	
ANTY 122S	Race and Minorities	
ANTY 133X	Food and Culture	
ANTY 211N	Anthropological Genetics	
ANTY 310	Human Variation	
ANTY 333	Culture and Population	
ANTY 418	Evolution and Genetic Variation in Human Populations	
ANTY 426	Culture, Health and Healing	
LING 375X	Linguistic Ecology and Language Endangerment	
Total Hours		3

Course List

Minimum Required Grade: C-

Subarea III: World Societies and Cultures

CODE	TITLE	HOURS
Complete 3 credits of the following courses:		3
ANTY 102H	Intro to South & S. East Asia	
ANTY 141H	The Silk Road	
ANTY 150X	Archaeology of Yellowstone: 11,000 Years of Native Americans in Yellowstone National Park	
ANTY 241H	Central Asian Culture and Civ	
ANTY 251H	Foundations of Civilization	
ANTY 254H	Arch Wonders of the World	
ANTY 323X	Native Peoples of Montana	
ANTY 330X	Peoples and Cultures of World	
ANTY 351H	Archaeology of North America	
ANTY 352X	Archaeology of Montana	
ANTY 353	PaleoIndian Archaeology	
ANTY 354H	Mesoamerican Prehistory	
ANTY 442	Cities/Landscapes Central Asia	
ANTY 444	Artistic Tradtns Central Asia	
ANTY 457	Arch of the Pacific Northwest	
ANTY 459	Archof the Arctic/Subarctic	
ANTY 465	Arch of the SW United States	
ANTY 494	Seminar/Workshop	
Total Hours		3

Course List

Minimum Required Grade: C-

Subarea IV: Concepts and Issues

CODE	TITLE	HOURS
Complete 3 credits of the following courses:		3
ANTY 126	Anthropology and Global Health	
ANTY 216	Primates in Peril	
ANTY 314	Principles of Forensic Anthro	
ANTY 326E	Indigenous Peoples & the Ethics of Development	
ANTY 336	Myth, Ritual and Religion	
ANTY 349	Social Change	
ANTY 422	Mind, Culture and Society	
ANTY 423	Culture and Identity	
ANTY 427	Anthropology of Gender	
ANTY 435	Drugs, Culture and Society	
ANTY 440	Cont. Issues of SSEA	
LING 473	Language and Culture	
LING 477	Bilingualism	
LING 484	NA Indigenous Lang & Ling	
LING 489	Morphology	
NASX 306X	Contemp Global Iss Indg People	
Total Hours		3

Course List

Minimum Required Grade: C-

Anthropology and Linguistics Electives

Rule: Complete 12 credits in Anthropology and Linguistics electives not completing core or subarea requirements. 12 total credits required.

Minimum Required Grade: C-

Medical Anthropology Concentration Requirements

CODE	TITLE	HOURS
Complete the following course:		
ANTY 426	Culture, Health and Healing	3
Total Hours		3

Course List

Minimum Required Grade: C-

Medical Anthropology Concentration Electives

CODE	TITLE	HOURS
Complete three of the following courses:		9
ANTY 126	Anthropology and Global Health	
ANTY 333	Culture and Population	
ANTY 418	Evolution and Genetic Variation in Human Populations	
ANTY 422	Mind, Culture and Society	
ANTY 435	Drugs, Culture and Society	
ANTY 433	Indig Global Health & Healing	
Total Hours		9

Course List

Minimum Required Grade: C-

Anthropology Minor < University of Montana

Anthropology Minor

Minor - Anthropology

College of Humanities & Sciences

Degree Specific Credits: 18

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Summary

CODE	TITLE	HOURS
Lower-Division Core Courses		12
Subarea I Electives		3
Subareas II, III and IV Electives		3
Total Hours		18

Course List

Lower-Division Core Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
ANTY 210N	Intro to Physical Anthropology	3
ANTY 220S	Culture & Society	3
ANTY 250S	Intro to Archaeology	3
LING 270S	Intro to Linguistics	3
Total Hours		12

Course List

Minimum Required Grade: C-

Subarea I Electives

CODE	TITLE	HOURS
Complete at least 3 credits in one the following courses:		3
ANTY 312	Human Evolution	
ANTY 400	History of Anthropology	
ANTY 402	Quan Ethnographic Field Methds	
ANTY 404	Anthropological Museology	
ANTY 403	Public Anthropology	
ANTY 408	Advanced Anthro Statistics	
ANTY 412	Osteology	
ANTY 413	Forensic and Mortuary Arch	
ANTY 415	Emergence Modern Humans	
ANTY 416	Dental Anthropology	
ANTY 430	Social Anthropology	
ANTY 431	Ethnographic Field Methods	
ANTY 450	Archaeological Theory	
ANTY 451	Cultural Resource Management	
ANTY 454	Lithic Technology	
ANTY 455	Artifact Analysis	
ANTY 456	Historical Archaeology	
ANTY 458	Arch of Hunter-Gatherers	
ANTY 466	Archaeological Survey (must be taken for 3 or more credits)	
ANTY 467	Archaeological Field School	
ANTY 476	Methods for Native Languages	
ANTY 495	Field Experience: (must be taken for 3 or more credits)	
LING 474	Historical Linguistics	
LING 475	Linguistic Field Methods	
Total Hours		3

Course List

Minimum Required Grade: C-

Subareas II, III, and IV Electives

CODE	TITLE	HOURS
Complete 3 credits of the following courses:		3
ANTY 102H	Intro to South & S. East Asia	

CODE	TITLE	HOURS
ANTY 104	Ancient Migrations	
ANTY 122S	Race and Minorities	
ANTY 126	Anthropology and Global Health	
ANTY 133X	Food and Culture	
ANTY 150X	Archaeology of Yellowstone: 11,000 Years of Native Americans in Yellowstone National Park	
ANTY 211N	Anthropological Genetics	
ANTY 310	Human Variation	
ANTY 314	Principles of Forensic Anthro	
ANTY 323X	Native Peoples of Montana	
ANTY 326E	Indigenous Peoples & the Ethics of Development	
ANTY 330X	Peoples and Cultures of World	
ANTY 333	Culture and Population	
ANTY 336	Myth, Ritual and Religion	
ANTY 349	Social Change	
ANTY 351H	Archaeology of North America	
ANTY 352X	Archaeology of Montana	
ANTY 353	PaleoIndian Archaeology	
ANTY 354H	Mesoamerican Prehistory	
ANTY 418	Evolution and Genetic Variation in Human Populations	
ANTY 422	Mind, Culture and Society	
ANTY 423	Culture and Identity	
ANTY 426	Culture, Health and Healing	
ANTY 427	Anthropology of Gender	
ANTY 435	Drugs, Culture and Society	
ANTY 440	Cont. Issues of SSEA	
ANTY 442	Cities/Landscapes Central Asia	
ANTY 444	Artistic Tradtns Central Asia	
ANTY 457	Arch of the Pacific Northwest	
ANTY 459	Archof the Arctic/Subarctic	
ANTY 465	Arch of the SW United States	
LING 375X	Linguistic Ecology and Language Endangerment	
LING 473	Language and Culture	

CODE	TITLE	HOURS
LING 477	Bilingualism	
LING 484	NA Indigenous Lang & Ling	
LING 489	Morphology	
NASX 306X	Contemp Global Iss Indg People	
Total Hours		3

Course List

Minimum Required Grade: C-

Forensic Studies Certificate < University of Montana

Forensic Studies Certificate

- Overview
- Requirements

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.

Post-secondary Certificate - Forensic Studies

College of Humanities & Sciences

Degree Specific Credits: 18

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

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.

Summary

CODE	TITLE	HOURS
Core Courses		6
Science Electives		6
Communication Elective		3
Ethics Elective		3
Total Hours		18

Course List

Core Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
CJUS 125N	Fund of Forensic Science	3
CJUS 488	Forensic Science the Crime Lab and Beyond	3
Total Hours		6

Course List

Minimum Required Grade: C-

Science Electives

Rule: Must complete 6 credits. To meet this requirement, students must complete six credits in courses with a suffix of "N" (courses that have been designated as University of Montana- Missoula General Education Group XI, Natural Sciences) in any department. 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. Please speak with your advisor about which courses may meet this requirement.

Minimum Required Grade: C-

6 Total Credits Required

Communication Elective

Rule: Must complete a 3 credit course. To meet this requirement, students must complete one 3-credit course related to written, oral, or pictorial communication, including selected courses in Art, Curriculum & Instruction, Communication Studies, Computer Science, Forestry, Journalism, Linguistics, Media Arts or any intermediate or advanced writing course. Courses numbered under 100 may not be counted toward meeting this requirement. WRIT 101 will not be accepted as fulfilling this requirement. Please speak with your advisor about which courses may meet this requirement.

Minimum Required Grade: C-

3 Total Credits Required

Ethics Elective

Rule: Must complete a 3 credit course. To meet this requirement, students 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 < University of Montana

Historic Preservation Certificate

- Overview
- Requirements

Historic Preservation is the interdisciplinary field that seeks to identify, document, preserve and protect significant structures, sites and landscapes.

Post-secondary Certificate - Historic Preservation

College of Humanities & Sciences

Degree Specific Credits: 18

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Summary

CODE	TITLE	HOURS
Core Courses		12
History Electives		3
Internship or Independent Study		3
Total Hours		18

Course List

Core Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
ANTY 451	Cultural Resource Management	3
ANTY 456	Historical Archaeology	3
GPHY 465	Planning Principles & Processes	3
HPRV 400	Historic Preservation	3
Total Hours		12

Course List

Minimum Required Grade: C

History Electives

CODE	TITLE	HOURS
Complete 3 credits of the following courses:		3
HSTA 320	Birth of Modern US	
HSTA 321	America in Crisis	
HSTA 322	U.S. History: WWII to Present	
Total Hours		3

Course List

Minimum Required Grade: C

Internship or Independent Study

Note: Internship must be with an approved, appropriate preservation-based agency or focused on an approved preservation-based topic.

CODE	TITLE	HOURS
Complete three credits of the following courses:		3
ANTY 398	Internship	
ANTY 492	Independent Study	
Total Hours		3

Course List

Minimum Required Grade: C

International Development Studies Minor < University of Montana

International Development Studies Minor

Minor - International Development Studies

College of Humanities & Sciences

Degree Specific Credits: 21

Required Cumulative GPA: 2.5

Catalog Year: 2019-2020

Note: At least seven credits must be upper division credits.

Summary

CODE	TITLE	HOURS
Core Courses		12
Content Courses		9
Total Hours		21

Course List

Core Courses

CODE	TITLE	HOURS
Complete four of the following courses:		12
ANTY 333	Culture and Population	
ANTY 349	Social Change	
ANTY 426	Culture, Health and Healing	
BGEN 360	International Business	
COMX 204X	International and Development Communication	
ECNS 217X	Issues in Economic Development	
ECNS 450	Adv. Topics in Economic Dev.	
ENST 487	Globalization, Justice & Environment	
GPHY 141S	Geography of World Regions	
GPHY 338	Mountains and Society	
IDS 497	Methods (Monitoring and Evaluation in International Development and Communication for Social and Behavioral Change)	
NRSM 170	International Envir. Change	
NRSM 424	Community Forestry & Conservtn	
NRSM 475	Environment & Development	
PSCI 327	Politics of Mexico	
PSCI 431	Politics of Global Migration	
PSCI 463	Development Administration	
PSCI 482	Politics of the World Economy	
PTRM 451	Tourism & Sustainability	
SOCI 270	Intro Development Sociology	
SOCI 471	Gender and Global Development	
S W 323	Women & Soc Action Amer	
S W 465	Social Work Global Context	
Total Hours		12

Course List

Minimum Required Grade: C-

Content Courses

CODE	TITLE	HOURS
Complete 9 credits of the following courses:		9

CODE	TITLE	HOURS
ANTY 326E	Indigenous Peoples & the Ethics of Development	
ANTY 330X	Peoples and Cultures of World (Africa)	
ANTY 333	Culture and Population	
ANTY 402	Quan Ethnographic Field Methds	
ANTY 423	Culture and Identity	
ANTY 427	Anthropology of Gender	
ANTY 491	Special Topics	
BGEN 160S	Issues in Sustainability	
BMGT 410	Sustainable Business Practices	
COMX 415	Intercultural Communication	
COMX 421	Communication in Nonprofit Organizations	
ECNS 101S	Economic Way of Thinking	
ECNS 433	Economics of the Environment	
ECNS 445	Int Env Econ & Clim Change	
ENST 493	Study Abroad: Environmental Justice Latin America	
ECNS 494	Senior Seminar (Sustainable Agriculture in Thailand)	
GPHY 121S	Human Geography	
GPHY 243	Africa	
GPHY 245X	The Middle East	
GPHY 432	Human Role Environmental Change	
GPHY 433	Community Resilience	
GPHY 434	Food and Famine	
GPHY 444	High Asia	
HSTR 231H	Modern Latin America	
HSTR 241H	Central Asian Cult & Civ	
MANS 495	Special Topics (Transitions from War to Peace)	
NASX 475	Tribal Sovereignty	
NRSM 352	Mountain Environment and Development	
NRSM 391	Special Topics (Society, Economy and Environment of the Mekong Delta)	
PSCI 220S	Intro to Comparative Government	
PSCI 230X	Intro to International Relations	
PSCI 325	Politics of Latin America	

CODE	TITLE	HOURS
PSCI 326	Politics of Africa	
PSCI 327	Politics of Mexico	
PSCI 443	Politics of Social Movements	
PTRM 353	Tourism, Livelihoods and Sustainability in Mountains	
SOCI 212S	Social Issues Southeast Asia	
SOCI 346	Rural Sociology	
SOCI 355	Population and Society	
SOCI 443	Sociology of Poverty	
Total Hours		9

Course List

Minimum Required Grade: C-

Anthropology M.A.

- **Overview**

University of Montana Department of Anthropology offers courses of study leading to the Master of Arts (M.A.) degree in Anthropology.

Successful completion of the M.A. degree in anthropology requires coursework, successful completion of a comprehensive evaluation, and significant original scholarly work. The anthropology faculty expects that students will complete the requirements for the M.A. degree in two years.

Master of Arts - Anthropology

College of Humanities & Sciences

Required Credits (Thesis/Professional Project): 30
Required Credits (Non-Thesis): 36

Required Cumulative GPA: 3.0

Catalog Year: 2019-2020

Background Classes

Background Classes Required for All Students in the Anthropology Graduate Program. These classes may have been taken previously as an undergraduate. These classes may be used as electives.

- We strongly recommend one class in each of the four fields of Anthropology
- We strongly recommend one or more classes in statistics or quantitative methods
- We strongly recommend one year of a foreign language

Thesis or Professional Paper Option

- Meet with advisor to form a study plan ANTY 500 Contemporary Anthropological Thought
- Anthropology/Linguistics Graduate Seminar (numbered 501-589, 595, 600-602, or 694)
- Anthropology/Linguistics Graduate Seminar (numbered 501-589, 595, 600-602, or 694)
- Anthropology/Linguistics Graduate Seminar or 3 credit Internship (numbered 501-589, 595, 598, 600-602, or 694)
- 6 credits in ANTY 593 Professional Project or ANTY 599 Thesis
- One "methods" class numbered 400 or higher (ANTY 402, 408, 412, 413, 416, 431, 451, 452, 454, 455, 456, 466, 467, 476, 495, 501, 512, 513*, 514*, 602; LING 475, 478, 570*, 575, 575, 584; or an anthropological or linguistic field experience of at least 3cr.* Courses marked with an asterisk may be taught as methods or theory and the students committee will determine whether or not to count it for this requirement.
- 9 credits in elective classes numbered 400 (UG) to 595.
- Thesis or Professional Paper
- Defense of Thesis or Professional Paper

Non-thesis Option

- ANTY 500 Contemporary Anthropological Thought
- Anthropology/Linguistics Graduate Seminar (numbered 501-589, 595, 600-602, or 694)
- Anthropology/Linguistics Graduate Seminar (numbered 501-589, 595, 600-602, or 694)
- Anthropology/Linguistics Graduate Seminar or 3 credit Internship (numbered 501-589, 595, 598, 600-602, or 694)
- A Graduate class (numbered 500-589 or 595) in any Discipline (Anthro is OK)
- One "methods" class numbered 400 or higher (ANTY 402, 408, 412, 413, 416, 431, 451, 452, 454, 455, 456, 466, 467, 476, 495, 501, 512, 513*, 514*, 602; LING 475, 478, 570*, 575, 575, 584; or an anthropological or linguistic field experience of at least 3cr.* Courses marked with an asterisk may be taught as methods or theory and the students committee will determine whether or not to count it for this requirement.

- 12 credits in elective classes numbered 400 to 589, 595, 600-602, 694
- A substantive graduate work such as an exhibit, portfolio, or other work that is not a thesis or professional paper
- Defense of the graduate work produced or a comprehensive examination

Anthropology M.A. - Cultural Heritage Option

- **Overview**

The Cultural Heritage Option is a way to earn the MA degree in anthropology while focusing on methods and theories related to preserving the culture, heritage, and diversity of all peoples. It is designed to produce professionals in the many areas of culture heritage preservation who are firmly grounded in the fundamentals of anthropology. This is a broad option, which can accommodate students with interests in a variety of areas, including:

- Cultural Resource Management, Historic Preservation, Prehistoric Archaeology, and similar archaeologically focused studies
- Ethnohistory, Tribal Recognition, Culture Preservation, Language Retention, and similar ethnographically focused studies
- Museology, Educational Anthropology, Public Archaeology, and similar areas that focus on interpreting cultures for the general public

The curriculum for students choosing this option is chosen in consultation with an appropriate faculty advisor, who will help guide the student toward appropriate classes for fulfilling their goals. Since this option is designed to train professionals, the focus is on practical professional experiences, which may include an internship with an appropriate company or agency. Out of which will emerge a professional paper, exhibit, portfolio, or other original creative work that is used to satisfy the MA degree requirements. Students who satisfactorily complete one of the following sets of requirements (plans) will earn the Master of Arts degree in Anthropology with the Cultural Heritage option.

Master of Arts - Anthropology - Cultural Heritage Option

College of Humanities & Sciences

Required Credits (Thesis/Professional Project): 30
Required Credits (Non-Thesis): 36

Required Cumulative GPA: 3.0

Catalog Year: 2019-2020

Thesis or Professional Paper Plan

(30 credits total)

- Anthropology 500, 601, and 602.
- At least 3 credits of Cooperative Education Experience (ANTH 598), or a course providing an intensive field or practical experience (and, in order to satisfy Graduate School requirements, one additional anthropology graduate seminar if the intensive field or practical experience course is not 500 or 600 level). Normally, the thesis or professional project is an outgrowth of this experience.
- A total of 1 to 10 credits in ANTH 599 (Thesis) or 593 (Professional Project), consistent with Graduate School requirements (6 credits recommended).
- At least one methods class numbered 400 or higher.
- A defended Thesis or Professional Paper/Project. A thesis is a document that presents the results of research in which data was gathered or analyzed in order to test a hypothesis. A professional paper consists of a project, report, exhibit, or similar scholarly contribution of the sort produced by professionals in the field of cultural heritage studies; or a scholarly work published in a refereed journal or other reviewed forum.

Non-thesis Plan

(36 credits total)

- Anthropology 500, 601, 602 and one additional anthropology graduate seminar chosen in consultation with the student's advisor.
- At least 3 credits of Cooperative Education Experience (ANTH 598) or a course providing an intensive field or practical experience (and, in order to satisfy Graduate School requirements, one additional anthropology graduate seminar if the intensive field or practical experience course is not 500 or 600 level). Normally, the scholarly work or portfolio is an outgrowth of this experience.
- A total of 1 to 10 credits in ANTH 597 (Research), consistent with Graduate School requirements (6 credits recommended).
- At least one methods class numbered 400 or higher.
- A comprehensive evaluation (a defense if the scholarly work or portfolio will satisfy this requirement, otherwise it may be administered as an examination)
- A reviewed scholarly work or portfolio (collection of shorter scholarly works).

Anthropology M.A. - Forensic & Biological Anthropology

- **Overview**

Track Options

The forensic anthropology option is a way to satisfy the requirements for the Master of Arts (MA) degree in anthropology while concentrating on classes of relevance to forensic anthropology. There are three pathways to doing this:

Thesis Track

Students may develop and demonstrate research skill by formulating a research project designed to contribute original knowledge to the field of forensic anthropology, bioarchaeology, human variation, or human skeletal biology, with the findings presented in a thesis. Pursuing this track will help the student prepare to pursue a career as a forensic or physical/biological anthropologist, or to continue their graduate education toward a doctorate.

Professional Paper Track

Students may develop and demonstrate competency in the skills forensic anthropologists by undertaking a project that results in a report, exhibit, or other scholarly contribution of the sort produced by professionals in the field. A scholarly work published in a refereed journal or other reviewed forum is also considered a professional paper. Due to the limited nature of our skeletal collection, many students choose to analyze a case from the teaching collection and produce a comprehensive case report type of professional paper. Pursuing this track will help the student prepare for a career as a forensic anthropologist or other career that emphasizes the practical application of skills in skeletal analysis.

The Portfolio Track

(The Graduate School refers to this as a non-thesis option) Students may design a MA program in which they specify a set of goals and a set of courses and other experiences that lead to achievement of these goals. Students demonstrate progress toward and satisfaction of their goals by collecting the work produced in their courses and other experiences into a portfolio. This track requires more course work than the thesis track or professional paper track. This track is designed for students who do not plan to work professionally as a forensic or physical/biological anthropologist or who plan to use their MA degree in another context (for example, educators seeking an MA degree in a field of science).

Master of Arts - Anthropology - Cultural Heritage Option

College of Humanities & Sciences

Required Credits (Thesis/Professional Project): 30
Required Credits (Non-Thesis): 36

Required Cumulative GPA: 3.0

Catalog Year: 2019-2020

Requirements

Core Requirements

Students who complete the core requirements and one of the tracks described below will earn the M.A. Degree in Anthropology with theForensic Anthropology Option. A detailed checklist for this option can be downloaded from the Anthropology Department website.

Core requirements for all students in the forensic anthropology option, regardless of whether they are pursuing the thesis, professional paper, or portfolio track:

- The following five (5) anthropology graduate seminars: ANTY 500, 510, 512, 513, and 515.
- A set of background courses, which ideally will have been taken previously as an undergraduate. At least one course must have been taken in each of these five areas, though it is possible with approval of the student's advisor for one course to count as both a forensic anthropology course and an osteology course. Students who enter the program without having previously completed these background courses must complete them before their MA degree is awarded and should realize that they may need more than the minimum number of credits to complete their MA degree
    - Forensic anthropology - a lecture or lecture plus laboratory course covering the principles of forensic anthropology (such as ANTY 314);

- Osteology - a laboratory or lecture plus laboratory course covering skeletal anatomy (such as ANTY 412);
- An archaeological field experience (such as ANTY 413, 466, or a volunteer or paid archaeological field experience);
- General forensic science (such as CJUS 488);
- Statistics (such as ANTY 401).

Thesis Track

In addition to the core requirements:

- A total of 1 to 10 credits in ANTY 599: Thesis, consistent with Graduate School requirements (6 credits recommended).
- Other appropriate courses as necessary to accumulate a total of 30 credits. ANTY 408 (formerly ANTH 402) is strongly recommended);
- A thesis that makes an original contribution to the field of physical/biological anthropology by applying data to test a hypothesis;
- A defense of the thesis.

Professional Paper Track

In addition to the core requirements:

- A total of 1 to 10 credits in ANTY 593: Professional Project, consistent with Graduate School requirements (6 credits recommended);
- Other appropriate courses as necessary to accumulate a total of 30 credits;
- A professional quality report, exhibit, or other scholarly contribution of the sort produced by professional forensic or physical/biological anthropologists.
- A defense of the professional paper, exhibit, or scholarly contribution.

Portfolio (Non-Thesis) Track

In addition to the core requirements:

- A total 1 to 10 credits in ANTH 597: Research, consistent with Graduate School requirements (6 credits recommended);
- One additional graduate seminar course numbered 500-589, 595, 598, or 600-694;
- Other appropriate courses as necessary to accumulate a total of 36 credits;
- A portfolio that documents the student's satisfaction of their educational goals and which is reviewed by the student's committee;
- A comprehensive evaluation (a defense of the portfolio will satisfy this requirement - otherwise it may be administered as an examination).

Anthropology M.A. - Linguistics

- **Overview**

The option is designed for students who wish to pursue studies of linguistics, languages, or linguistic analysis. The program's focus is on regional Native American languages, native language revitalization and maintenance, and English as a second language.

The Linguistics Option is primarily oriented toward academic research and most students conduct original research that results in a thesis that is used to satisfy the MA degree requirements. Classes are chosen with advice from a faculty advisor to fulfill the student's goals.

Master of Arts - Anthropology - Linguistics Option

College of Humanities & Sciences

Required Credits: 30

Required Cumulative GPA: 3.0

Catalog Year: 2019-2020

Students who satisfactorily complete the following core requirements will earn the Master of Arts degree in Anthropology with the Linguistics option.

- Anthropology 500, LING 570, and 6 credits in additional Anthropology or Linguistics graduate seminars; this total may include 3 credits in an appropriate cooperative education experience (internship).
- A total 1 to 10 credits in ANTH 599, consistent with graduate school requirements (6 credits recommended).
- Four courses from LING 470-475 or 484, if not taken as an undergraduate.

NOTE: This option differs from the MA in Linguistics, offered through the Linguistics Program.

Anthropology Ph.D.

- **Overview**

The PhD in Anthropology with General Option requires 60 credits total beyond the bachelor's degree, completion of the coursework for one of the UM Anthropology MA Options or an equivalent 30+ credit master's degree from another institution, completion of courses in specific areas of the curriculum, a comprehensive examination consisting of a defense of the student's research proposal, a dissertation on a topic of relevance to Anthropology, and a defense of the dissertation.

Doctor of Philosophy - Anthropology

College of Humanities & Sciences

Required Credits: 60 (30 + 30 from M.A.)

Required Cumulative GPA: 3.0

Catalog Year: 2019-2020

Degree Requirements

The General Option requires coursework, a reviewed portfolio, a comprehensive examination, and a defended dissertation. The faculty expects completion of the Ph.D. within three years of earning the master's degree. All students entering the Ph.D. program must have the equivalent of an M.A. degree before they can proceed to Ph.D. status. For students accepted into the program with only an undergraduate degree, they must complete the requirements of an M.A. degree prior to moving into the Ph.D. program. Students initially accepted into the M.A. program can continue into the Ph.D. program, but they must complete the M.A. degree prior to continuing; those students must also apply for the Ph.D. program during the regular application cycle (even though they are extant M.A. students).

Coursework

Coursework for the Ph.D. General Option requires 30 credits beyond those required for the master's degree, for a total of 60 credits. At least 20 of these credits must be in ANTY or LING. A maximum of 10 credits in research courses (ANTY 593, 597, 599, 697, 699) may be applied to these 30 credits. No more than 9cr total in any combination of Independent Studies and Internship courses may be applied to these 30 credits.

Curriculum

The curriculum for the 60 credits required for the General Ph.D. Option focuses on a solid grounding in anthropological theory, methods for generating or collecting anthropological data, and methods for analysis of anthropological data. All students must take (or have taken) ANTY 500, ANTY 601, and a course in introductory statistics such as ANTY 401. In addition, at least one course must be taken from each of the areas below. Reasonable substitutions of courses, including courses from other departments and institutions, may be approved by the student's committee.

Anthropological theory:

- ANTY 510*: Seminar in Human Variation & Evolution
- ANTY513*#: Seminar in Bioarchaeology & Skeletal Biology
- ANTY514*#: Seminar in Paleoanthropology & Evolutionary Analysis
- ANTY515: Theory & Methods in Biological Anthropology
- ANTY520*: Seminar in Ethnology
- ANTY521: Applied Anthropology
- ANTY522: Medical Anthropology
- ANTY550: Seminar in Archaeology
- ANTY551: Seminar in Historical Archaeology
- ANTY552: Power, Prestige & Things
- ANTY553: Seminar in Evolutionary Archaeology
- ANTY600: Issues in Cultural Heritage

- LING 570*: Seminar in Linguistics
- LING573: Language & Culture

Methods for generating or collecting anthropological knowledge:

- ANTY 412: Osteology
- ANTY413: Forensic & Mortuary Archaeology
- ANTY416: Dental Anthropology
- ANTY431: Ethnographic Field Methods
- ANTY451: Cultural Resource Management
- ANTY466*: Archaeological Survey
- ANTY467*: Archaeological Field School
- ANTY476: Methods for Native Languages
- ANTY495*: Field Experience
- ANTY501: Historical Anthropology
- ANTY512*: Advanced Forensic Anthropology
- ANTY602: Cultural Heritage Policy & Practice
- LING 571: Phonetics & Phonology
- LING575: Linguistic Field Methods
- LING584: North American Indigenous Languages
- LING589: Morphology

Analysis of anthropological data:

- ANTY402: Quantitative Ethnographic Methods
- ANTY408: Advanced Anthropological Statistics
- ANTY452: GIS in Archaeology
- ANTY454: Lithic Technology
- ANTY455: Artifact Analysis
- ANTY513*#: Seminar in Bioarchaeology & Skeletal Biology
- ANTY514*#: Seminar in Paleoanthropology & Evolutionary Analysis*
- LING 574: Historical Linguistics

Coursework

Students are expected to complete the following course requirements:

Please refer to the Graduate Student Manual for specific curriculum that is required of the General Option Ph.D.

Anthropology Ph.D. - Cultural Heritage and Applied Anthropology

- **Overview**

Our doctoral program specializes in Cultural Heritage and Applied Anthropology. Students in this program focus not only on cutting-edge research, but also the application of anthropology to one or more central issues of the 21st century. These include the preservation of heritage and traditions, whether objects, landscapes, or language; international social issues, particularly global development and health delivery; or understanding the biological basis of humankind. This program requires more extensive coursework than the M.A. and, even more importantly, the achievement of independent professional-level scholarship demonstrated by completion of a major research project presented to the faculty as a dissertation. This comprehensive yet individualized program provides seasoned professionals and recent B.A. and M.A. graduates alike an opportunity to earn a Doctorate.

Cultural heritage studies analyzes 'heritage' as an archaeological, ethnohistorical, social, biological, linguistic, and legal construct. Heritage reflects a socially and personally important set of cultural, linguistic, and biological attributes that has developed through historical processes, which have social and legal meanings and consequences. The concept recognizes diverse ethnic and cultural backgrounds while grounded in principles of the unity of heritage for all people. Different notions of heritage are explored from a theoretical perspective using various anthropological and other relevant paradigms. The course of study covers topics such as cultural resource management, social impact assessment, the interaction between cultures, invention of tradition through time, cultural landscapes, cultural property, biological heritage issues, and retention of culture and language. An overlapping concern of the Ph.D. program is applied anthropology, the use of the anthropological perspective to solve real-world problems, including cultural heritgage, medical anthropology, and a host of international development issues.

At the heart of our program is a strong commitment to employ anthropological theory to engage contemporary relevant issues with focused research for communities. While some that are awarded a Ph.D. in Anthropology from University of Montana will look toward teaching careers, a goal of the program is to produce applied anthropologists who will serve in government agencies, nongovernmental organizations (NGOs), tribal and ethnic associations, and businesses.

Doctor of Philosophy - Anthropology - Cultural Heritage and Applied Anthropology Option

College of Humanities & Sciences

Required Credits: 60 (30 + 30 from M.A.)

Required Cumulative GPA: 3.0

Catalog Year: 2019-2020

Degree Requirements

The General Option requires coursework, a reviewed portfolio, a comprehensive examination, and a defended dissertation. The faculty expects completion of the Ph.D. within three years of earning the master's degree. All students entering the Ph.D. program must have the equivalent of an M.A. degree before they can proceed to Ph.D. status. For students accepted into the program with only an undergraduate degree, they must complete the requirements of an M.A. degree prior to moving into the Ph.D. program. Students initially accepted into the M.A. program can continue into the Ph.D. program, but they must complete the M.A. degree prior to continuing; those students must also apply for the Ph.D. program during the regular application cycle (even though they are extant M.A. students).

The Cultural Heritage Studies and Historical Anthropology Ph.D. program requires coursework, a reviewed portfolio, a comprehensive examination, and a defended dissertation. The faculty expects completion of the Ph.D. within three years of earning the masters degree.

Coursework

Students are expected to complete the following course requirements:

- A total of 30 credits beyond those required for the MA degree (total of at least 60 credits post bachelors degree).
- The core course sequence consisting of ANTY 600, 601, and 602.
- At least nine credits in research (ANTY 697) and/or dissertation (ANTY 699). Students may apply up to 10 credits of ANTY 593/597/599 or the equivalent and 10 credits of ANTY 697/699 or the equivalent toward the 60 post-baccalaureate credits required for the degree. After students have earned a M.A. degree they may not enroll in ANTY 593/597/599.

Applied Science < University of Montana

Applied Science

- Overview
- Programs

The Bachelor of Applied Science (BAS) degree at the University of Montana (UM) is designed for individuals who have completed an Associate of Applied Science (AAS) degree and want to pursue additional education to strengthen their planned or previous training and improve career advancement opportunities. As such, students pursuing the BAS build a tailored degree plan that suits their specific academic and professional goals.

Up to 50 technical credits earned as part of an AAS degree may count towards the total credits required for the BAS. A maximum of 20 technical credits, on the other hand, may be counted in the total number of credits required for the other baccalaureate degrees at UM (i.e. Bachelor of Arts and Bachelor of Science degrees).

Any courses taken as part of the AAS that can count towards UM General Education Requirements (e.g. certain writing, psychology, math, and communication courses) *are not* considered technical and, hence, are not included in this 50 technical credit maximum.

BAS Degree Requirements

Students who have completed an AAS degree with at least a 2.50 cumulative GPA are eligible to pursue the BAS at UM. The AAS degree must be earned from a regionally accredited institution for higher education. The degree requirements for the BAS degree include completion of:

- A minimum of 127 total earned semester credits
  - 30 of the 127 total required must consist of an upper-division student tailored degree plan curriculum
  - 39 of the 127 total required must be upper-division; this total number includes all credits taken as part of the degree plan curriculum
- All UM General Education Requirements

BAS Degree Plan

As part of the BAS curriculum, students must develop a degree plan. Due to the nature of the BAS, many plans are interdisciplinary in nature (i.e. consist of courses from multiple disciplines).

It is important to understand that the BAS degree does not identify a specific discipline major. Even though some plans may consist of courses from one discipline (e.g. communication studies, psychology, geology), the student is NOT a Communication Studies, Psychology, or Geology major. Hence, the BAS student s transcript and diploma will not indicate a specific major.

BAS Program Process

- Complete Student Information and Goals form and email to the Academic Advising Center (contact information below)
  - A BAS advisor will review the form and contact you
- Discuss BAS with BAS advisor
  - If BAS is selected, apply for admission to BAS Program
- Build initial draft of degree plan using Student Degree Plan form
- Make a one-on-one advising appointment with BAS advisor
  - Submit and review first draft of degree plan
  - Discuss creating a degree plan committee
- Contact and meet with potential degree plan committee members
- Finalize degree plan and have all committee members sign the Degree Plan Curriculum Approval form

NOTE: All forms are located on the BAS Degree Forms & Documents webpage.

BAS Contact Information

To ask general questions, individuals may contact the Missoula College Academic Advising Center at AcademicAdvisingCenter@umontana.edu.

Undergraduate

- Bachelor of Applied Science

Bachelor of Applied Science < University of Montana

Bachelor of Applied Science

- Overview
- Requirements

Missoula College Academic Advising Center

The Bachelor of Applied Science (B.A.S.) degree at the University of Montana (UM) is designed for individuals who have completed an Associate of Applied Science (AAS) degree with a 2.50 grade point average 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.) Individuals pursuing the B.A.S. are those who are seeking additional education to strengthen their planned or previous training and improve career advancement opportunities.

As part of the B.A.S. curriculum, students must develop a degree plan tailored to their academic and professional goals. Due to the nature of the B.A.S., many plans are interdisciplinary in nature (i.e. consist of courses from multiple disciplines). Students initially meet with a B.A.S. advisor at Missoula College for assistance in developing their degree plan curriculum. After drafting their plan, students create a degree plan committee that consists of faculty members from disciplines represented in the plan. This committee provides final approval of the plan.

Bachelor of Applied Science students must meet all the University of Montana requirements for graduation. Up to 50 technical credits from an accredited A.A.S. program will count toward the 127 total credits required for graduation.

Any courses taken as part of the A.A.S. that can count towards UM General Education Requirements (e.g. certain writing, psychology, math, and communication courses) *are not* considered technical and, hence, are not included in this 50 technical credit maximum.

It is important to understand that the B.A.S. degree does not identify a specific discipline major. Even though some plans may consist of courses from one sole discipline, the student is NOT a major in that discipline. Hence, the B.A.S. student s transcript and diploma will not indicate a specific major or concentration area.

Although students submit their application for admission to and are initially advised through Missoula College, B.A.S. students are enrolled through the mountain campus and, as such, are assessed UM-Missoula tuition rates.

Students interested in pursuing the B.A.S. degree should review the Missoula College Academic Advising Center s B.A.S. webpage for informational resources and to learn how to request an initial advising appointment.

Bachelor of Applied Science - Applied Science

College of Humanities & Sciences

Degree Specific Credits: 127

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

CODE	TITLE	HOURS
Mathematics		3-4
Perspectives		27
Expressive Arts (A)		
Literary & Artistic Studies (L)		
Historical & Cultural Studies (H)		
Social Sciences (S)		
Ethical & Human Values (E)		
Democracy and Citizenship (Y)		
Cultural and International Diversity (X)		
Natural Sciences (N)		
Lower-Division Approved Writing Course		
Writing Skills		6
Statistics/Foreign Language		3-10
Upper-Division Credit Requirement		39
Upper-Division Writing		3
AAS Degree Credits		38-50
Total Hours		119-139

Course List

Mathematics

Rule: Any Mathematics course level 104 or higher (excluding M 111).

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

Perspectives

Rule: A minimum of 3 credits towards each Perspective Category is required, except Natural Sciences.

Note: Some courses satisfy multiple Perspectives or GER Categories. Some courses included in your specific degree plan 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.

Democracy and Citizenship (Y)

Rule: A minimum of three credits is required.

Cultural and International Diversity (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.

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/WRIT 201 required. Prerequisites may apply.

CODE	TITLE	HOURS
WRIT 101	College Writing I	3
or WRIT 201	College Writing II	
Total Hours		3

Course List

Minimum Required Grade: C-

Lower-Division Approved Writing Course

Rule: Any course designated as an Approved Writing Course during semester it's taken.

Foreign Language

Rule: Foreign Language or Statistics Course

Minimum Required Grade: C-

3-10 Total Credits Required

Statistics Course

Rule: Successful completion of 1 course from the list below.

Note: Prerequisites apply for all courses listed below; 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.

CODE	TITLE	HOURS
Select one of the following:		3-4
M 133	Geometry and Measurement for Elementary School Teachers	
M 162	Applied Calculus	
M 171	Calculus I	
PSYX 222	Psychological Statistics	
SOCI 202	Social Statistics	
STAT 216	Introduction to Statistics	
Total Hours		3-4

Course List

Minimum Required Grade: C-

Foreign Language

Rule: Successful completion of first-year sequence of a Modern and Classical Language (MCLL).

Note: A first-year sequence usually consists of courses numbered 101 & 102 (5 credits each) for most catalog-approved languages, though some exceptions to this course numbering and sequencing apply. Depending on the language, students may take a placement test to demonstrate proficiency to receive non-credit exemption from this requirement. Refer to the General Education Requirements section of this catalog and speak with your advisor for more information.

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 plan.

39 Total Credits Required

Upper-Division Writing

Rule: At least one upper-division writing course is required for UM GERs.

Note: This course may be included as part of the student's degree plan or total Upper-Division Credits.

3 Total Credits Required

AAS Degree Credits

Rule: Up to 50 technical credits earned from AAS may be counted towards the 127 required for the BAS.

Minimum Required Grade: C-

38-50 Total Credits Required

Biological Sciences < University of Montana

Biological Sciences

- Overview
- Programs

Creagh Breuner, Associate Dean

The Division of Biological Sciences has undergraduate and graduate programs representing the full range of the biological sciences. The Division offers Bachelor's degrees in:

- Biology (with a broad array of formal concentrations described in more detail below)
- Medical Laboratory Science
- Microbiology, including microbial ecology
- Wildlife Biology (a cooperative program administered by the College of Forestry and Conservation)
- Biochemistry (an interdepartmental degree administered by the Chemistry Department)
- Neuroscience (an interdepartmental degree with the Psychology 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, a year-round academic center for the 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.

Bachelor of Science Degrees:

Biology B.S.: Provides a solid foundation in core areas of the biological sciences and in supporting physical sciences and mathematics. Several concentrations are available within the B.S. 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), 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.

Microbiology B.S.: Microbiology is the study of microorganisms, including bacteria, yeasts, molds, viruses, protozoa and other microscopic parasites. The Bachelor s degree in Microbiology is offered as a general degree or with a concentration in microbial ecology. The general concentration emphasizes microbial structure, function, and interactions and relationships with humans. The microbial ecology concentration emphasizes microbial structure, function, and interactions and relationships with the environment and other organisms.

Medical Laboratory Science B.S.: Medical Laboratory Science or clinical laboratory science is a professional program with a combined study of chemistry, physiology and microbiology. A medical laboratory scientist performs chemical, microscopic, and microbiological procedures used in the diagnosis, study and treatment of human disease. Medical laboratory scientists are in high demand in hospitals, clinical labs, research institutions and government health departments. Board certification is required for clinical practice. To become certified, a student, after satisfying the minimum course requirements, completes a clinical practicum of at least 12 consecutive months in a school of medical laboratory science accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS). After completing a clinical practicum and passing the American Society for Clinical Pathology (ASCP) Board of Certification examination, the student is certified as a Medical Laboratory Scientist [MLS(ASCP)].

The University of Montana has two coursework tracks for the Medical Laboratory Science B.S. degree. The 3+1 track includes the practicum at one of our affiliated programs as part of the degree, while the practicum is not included in the 4+1 track.

Bachelor of Arts Degrees:

Biology B.A.: Two concentrations are available for the Biology B.A.:

- **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 (middle or high school) level.

Degree requirements for all majors and courses are described below (see the College of Forestry and Conservation for information about Wildlife

Degree requirements for all majors and courses are described below (see the College of Forestry and Conservation for information about Wildlife Biology; the Biochemistry Program in the College of Humanities and Sciences for information about Biochemistry; the Psychology Program in the College of Humanities and Sciences for information about Neuroscience).

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. The Division offers courses designed specifically for non-majors: Microbiology for Health Sciences, Introductory Ecology, Survey of Montana Wildlife and Habitats, and others.

Undergraduate

- Biology B.A., Natural History Concentration
- Biology B.A., Biological Education Concentration
- Biology B.A., Teacher Preparation General Science Broadfield Concentration
- Biology B.S., Cellular & Molecular Biology Concentration
- Biology B.S., Ecology and Organismal Biology Concentration
- Biology B.S., Field Ecology Concentration
- Biology B.S., Genetics and Evolution Concentration
- Biology B.S., Human Biological Sciences Concentration
- Medical Laboratory Science B.S.
- Microbiology B.S.
- Microbiology B.S., Microbial Ecology Concentration

Undergraduate Minors

- Biology
- Microbiology

Biology B.A. - Biological Education

- Overview
- Requirements

Individuals interested in teaching in K-12 schools must complete a degree in the content area they want to teach plus the Teacher Education Program through the Department of Teaching and Learning. Individuals must complete the teaching track within that degree program, which may contain different course requirements than the non-teaching track 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 Concentration

College of Humanities & Sciences

Degree Specific Credits: 68

Required Cumulative GPA: 2.75

Catalog Year: 2019-2020

Note: This concentration provides students with coursework in Biology and related sciences and mathematics needed to be certified by the State of Montana to teach secondary Biology (in middle and high school). This concentration 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.

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

Course List		
CODE	**TITLE**	**HOURS**
Biology/Microbiology Lower-Division Core		17
Upper-Division Core Courses Required by the Biological Education Concentration		14
Animal-Based Organismal Course Requirement		3
Required Courses Outside of the Major		31
Mathematics - Calculus		
Mathematics - Statistics		
Chemistry		
Physics		
Environmental Geosciences		
Education		
Advanced College Writing Requirement		3
Secondary Teaching Licensure		
Total Hours		68

Biology/Microbiology Lower-Division Core

Note: The lower-division core should be completed before attempting most upper division major courses. AP Biology credit with a score of 3 may be substituted for either BIOB 160N/BIOB 161N or BIOB 170N/BIOB 171N.

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
BIOB 160N	Principles of Living Systems	3
BIOB 161N	Prncpls of Living Systems Lab	1
BIOB 170N	Princpls Biological Diversity	3
BIOB 171N	Princpls Biological Dvrsty Lab	2
BIOB 260	Cellular and Molecular Biology	4
BIOB 272	Genetics and Evolution	4
Total Hours		17

Minimum Required Grade: C-

Upper-Division Core Courses Required by the Biological Education Concentration

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
BIOE 370	General Ecology	3
BIOE 371	Gen Ecology Lab (equiv to 271)	2
BIOM 360	General Microbiology	3
BIOM 361	General Microbiology Lab	2
BIOO 433	Plant Physiology	3
BIOO 434	Plant Physiology Lab	1
Total Hours		14

Minimum Required Grade: C-

Animal-Based Organismal Course Requirement

Course List		
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		
BIOB 301	Developmental Biology	3
or BIOL 435	Comparative Animal Physiology	
Total Hours		3

Minimum Required Grade: C-

Required Courses Outside of the Major

Mathematics - Calculus

Note: Students should choose M 171 if they plan to take additional calculus courses or if they plan a double major or minor in a field that requires more calculus (e.g. astronomy, math, physics, biochemistry, computer science).

Course List		
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		4
M 162	Applied Calculus	
M 171	Calculus I	
Total Hours		4

Minimum Required Grade: C-

Mathematics - Statistics

Course List		
CODE	**TITLE**	**HOURS**
Complete the following course:		
STAT 216	Introduction to Statistics	4
Total Hours		4

Minimum Required Grade: C-

Chemistry

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
CHMY 121N	Introduction to General Chemistry	4
CHMY 123	Introduction to Organic and Biochemistry	4
CHMY 124	Introduction to Organic and Biochemistry Lab	2
CHMY 485	Laboratory Safety	1
Total Hours		11

Minimum Required Grade: C-

Physics

Course List		
CODE	**TITLE**	**HOURS**
Complete one of the following Physics courses:		5
Algebra- and Trigonometry-based Physics:		
PHSX 205N & PHSX 206N	College Physics I and College Physics I Laboratory	
Calculus-based Physics:		
PHSX 215N & PHSX 216N	Fund of Physics w/Calc I and Physics Laboratory I w/Calc (requires M 171)	
Total Hours		5

Minimum Required Grade: C-

Environmental Geosciences

Course List		
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		
GEO 105N	Oceanography	3
or GEO 103N	Introduction to Environmental Geology	
Total Hours		3

Minimum Required Grade: C-

Education

Note: The course number EDU 497 covers many different teaching method courses. The section of EDU 497 entitled "Methods: 5 - 12 Science" for 3 credits is required for the Biological Education option.

Course List		
CODE	**TITLE**	**HOURS**
Complete the following course:		
EDU 497	Teaching and Assessing	4
Total Hours		4

Minimum Required Grade: C-

Advanced College Writing Requirement

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
BIOE 371	Gen Ecology Lab (equiv to 271)	2
BIOO 434	Plant Physiology Lab	1
Total Hours		3

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. For more information, see the Teaching and Learning Department.

University Of Montana

Biology B.A. - Natural History

Bachelor of Arts - Biology; Natural History Concentration

College of Humanities & Sciences

Degree Specific Credits: 75

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: The Natural History concentration is designed for students who seek an interdisciplinary science program. This concentration 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.).

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

Course List		
CODE	**TITLE**	**HOURS**
Biology/Microbiology Lower-Division Core		17
Upper-Division Core Courses Required by Natural History Concentration		24
Required Courses Outside of the Major		34
Chemistry and Geology		
Cognate Electives		
Total Hours		75

Biology/Microbiology Lower-Division Core

Note: The lower-division core should be completed before attempting most upper-division major courses. AP Biology credit with a score of 3 may be substituted for either BIOB 160N/BIOB 161N or BIOB 170N/BIOB 171N.

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
BIOB 160N	Principles of Living Systems	3
BIOB 161N	Prncpls of Living Systems Lab	1
BIOB 170N	Princpls Biological Diversity	3
BIOB 171N	Princpls Biological Dvrsty Lab	2
BIOB 260	Cellular and Molecular Biology	4
BIOB 272	Genetics and Evolution	4
Total Hours		17

Minimum Required Grade: C-

Upper-Division Core Courses Required by Natural History Concentration

Course List		
CODE	**TITLE**	**HOURS**
Complete one of the following Ecology courses:		5
BIOE 342	Field Ecology	
BIOE 370 & BIOE 371	General Ecology and Gen Ecology Lab (equiv to 271)	
Complete all of the following courses:		
BIOE 406	Behavior & Evolution	3
BIOO 320	General Botany	5
BIOO 335	Rocky Mountain Flora	3
BIOO 462	Entomology	4
Complete one of the following courses:		4
BIOO 470	Ornithology	
BIOO 475	Mammalogy	
Total Hours		24

Minimum Required Grade: C-

Required Courses Outside of the Major

Chemistry and Geology

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
Chemistry:		
CHMY 121N	Introduction to General Chemistry	4
CHMY 123	Introduction to Organic and Biochemistry	4
CHMY 124	Introduction to Organic and Biochemistry Lab	2
Geology:		
GEO 101N	Introduction to Physical Geology	3
GEO 102N	Introduction to Physical Geology Lab	1
Total Hours		14

Minimum Required Grade: C-

Cognate Electives

Note:

- Students should plan on taking M 121 or higher level M course (prerequisite for BIOB 272 and GER math requirement) and STAT 216 (pre- or co-requisite for BIOE 371).
- Students interested in combining the Natural History concentration with another subject area may, with the advisor's permission, substitute 10 credits in English - writing, journalism, photography, art, modern & classical language, business management, or other appropriate field.

Course List		
CODE	**TITLE**	**HOURS**
Complete 20 credits in the following disciplines, with a maximum of 10 credits in any one discipline:		20
Anthropology (ANTY)		
Astronomy (ASTR)		
Chemistry (CHMY) - excluding CHMY 121N, 123, and 124		
Geography (GPHY)		
Geology (GEO) - excluding GEO 101N and 102N		
Forestry/Natural Resource Management (FORS/NRSM)		
Mathematics/Statistics (M/STAT)		
Physics (PHSX)		
Wildlife Biology (WILD)		
Total Hours		20

Minimum Required Grade: C-

Biology B.A. - Teacher Preparation General Science Broadfield

- Overview
- Requirements

Individuals interested in teaching in K-12 schools must complete a degree in the content area they want to teach plus the Teacher Education Program through the Department of Teaching and Learning. Individuals must complete the teaching track within that degree program, which may contain different course requirements than the non-teaching track 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, Teaching General Science Broadfield Concentration

College of Humanities & Sciences

Degree Specific Credits: 73-75

Required Cumulative GPA: 2.75

Catalog Year: 2019-2020

Note: This concentration 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 sciences - Biology, Chemistry, Physics, and Earth Science (in middle and high schools). This concentration 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.

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

Course List		
CODE	**TITLE**	**HOURS**
Lower-Division Courses in the Content Areas		53
Biology Content Courses		
Chemistry Content Courses		
Earth Sciences Content Courses		
Earth Sciences Content Courses - Environmental Geosciences		
Physics Content Courses		
Upper Division Content Courses		5
Required Courses Outside of the Major		12
Mathematics - Calculus		
Mathematics - Statistics		
Education Course		
Advanced College Writing Requirement		3-5
Secondary Teaching Liscensure		
Total Hours		73-75

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 following content areas.

Biology Content Courses

Note: An AP Biology score of 3 will substitute for either BIOB 160N/BIOB 161N or BIOB 170N/BIOB 171N.

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
BIOB 160N	Principles of Living Systems	3
BIOB 161N	Prncpls of Living Systems Lab	1
BIOB 170N	Princpls Biological Diversity	3
BIOB 171N	Princpls Biological Dvrsty Lab	2
BIOB 260	Cellular and Molecular Biology	4
BIOB 272	Genetics and Evolution	4
Total Hours		17

Minimum Required Grade: C-

Chemistry Content Courses

Note: CHMY 141N/CHMY 142N & CHMY 143N/CHMY 144N should be completed before attempting CHMY 123.

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
CHMY 123	Introduction to Organic and Biochemistry	4
CHMY 141N & CHMY 142N	College Chemistry I and College Chemistry I Lab	5
CHMY 143N & CHMY 144N	College Chemistry II and College Chemistry II Lab	5
CHMY 485	Laboratory Safety	1
Total Hours		15

Minimum Required Grade: C-

Earth Sciences Content Courses

Note: ASTR 132N/ASTR 135N are NOT acceptable substitutes for ASTR 131N/ASTR 134N.

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
ASTR 131N	Planetary Astronomy	3
ASTR 134N	Planetary Astronomy Lab	1
GEO 101N	Introduction to Physical Geology	3
GEO 102N	Introduction to Physical Geology Lab	1
Total Hours		8

Minimum Required Grade: C-

Earth Sciences Content Courses - Environmental Geosciences

Course List		
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		3
GEO 103N	Introduction to Environmental Geology	
GEO 105N	Oceanography	
Total Hours		3

Minimum Required Grade: C-

Physics Content Courses

Course List		
CODE	**TITLE**	**HOURS**
Complete one of the following Physics sequences:		10
Algebra- and Trigonometry-based Physics:		
PHSX 205N & PHSX 206N	College Physics I and College Physics I Laboratory	
PHSX 207N & PHSX 208N	College Physics II and College Physics II Laboratory	
Calculus-based Physics:		
PHSX 215N & PHSX 216N	Fund of Physics w/Calc I and Physics Laboratory I w/Calc	
PHSX 217N & PHSX 218N	Fund of Physics w/Calc II and Physics Laboratory II w/Calc (require M 171 and M 172)	
Total Hours		10

Minimum Required Grade: C-

Upper-Division Content Courses

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
BIOE 370	General Ecology	3
BIOE 371	Gen Ecology Lab (equiv to 271)	2
Total Hours		5

Minimum Required Grade: C-

Required Courses Outside of the Major

Mathematics - Calculus

Note: Students should choose M 171 if they plan to take additional calculus courses or if they plan a double major or minor in a field that requires more calculus (e.g. astronomy, math, physics, biochemistry, computer science).

Course List		
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		4
M 162	Applied Calculus	
M 171	Calculus I	
Total Hours		4

Minimum Required Grade: C-

Mathematics - Statistics

Course List		
CODE	**TITLE**	**HOURS**
Complete the following course:		
STAT 216	Introduction to Statistics	4
Total Hours		4

Minimum Required Grade: C-

Education

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 Concentration.

Course List		
CODE	**TITLE**	**HOURS**
Complete the following course:		
EDU 497	Teaching and Assessing	4
Total Hours		4

Minimum Required Grade: C-

Advanced College Writing Requirement

Rule: To meet the Advanced College Writing Requirement, Biology students must complete 2 or 3 partial writing courses (either three 1/3 writing courses or one 1/3 writing course and one 2/3 writing course) or one complete writing course. The General Science Broadfield requires one 2/3 writing course (BIOE 371). The advanced college writing requirement is completed with one additional course, chosen from any of the following. The recommended course is BIOO 434 (taken with BIOO 433), which is required for the Teaching Biology endorsement.

1/3 Advanced Writing Courses

Course List		
CODE	**TITLE**	**HOURS**
BCH 482	Advanced Biochemistry II	3
BIOB 410	Immunology	3
BIOB 425	Adv Cell & Molecular Biology	3
BIOB 483	Phylogenics and Evolution	3
BIOE 403	Comparative Vert Anatomy	4
BIOE 409	Behavior & Evolution Discussion	1
BIOE 428	Freshwater Ecology	5
BIOL 484	Plant Evolution	3
BIOM 402	Medical Bacteriology& Mycology	3
BIOO 320	General Botany	5
BIOO 434	Plant Physiology Lab	1
BIOO 470	Ornithology	4
BIOO 475	Mammalogy	4

Minimum Required Grade: C-

2/3 Advanced Writing Courses

Course List		
CODE	**TITLE**	**HOURS**
BCH 486	Biochemistry Research Lab	3
BCH 499	Senior Thesis/Capstone	3-6
BIOB 411	Immunology Laboratory	2
BIOB 499	Undergraduate Thesis	3-6
BIOE 342	Field Ecology	5
BIOE 371	Gen Ecology Lab (equiv to 271)	2
BIOM 411	Exprmntl Microbial Genetcs Lab	1
BIOM 499	Undergraduate Thesis	3-6

Minimum Required Grade: C-

Complete Advanced Writing Course

Course List		
CODE	**TITLE**	**HOURS**
BIOH 462	Principles Medical Physiology	3

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. For more information, see the Teaching and Learning Department.

Biology B.S. - Cellular and Molecular Biology < University of Montana

Biology B.S. - Cellular and Molecular Biology

Bachelor of Science - Biology; Cellular & Molecular Biology Concentration

College of Humanities & Sciences

Degree Specific Credits: 83-87

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: Cellular and Molecular Biology is the study of cellular, molecular, and physiological aspects of Biology. This concentration 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 concentration for pre-medical sciences students.

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

CODE	TITLE	HOURS
Biology/Microbiology Lower-Division Core		17
Upper-Division Core Courses Required by Cellular & Molecular Biology Concentration		20
Additional Upper-Division Major Courses Required for the Cellular & Molecular Biology Concentration		8-12
Disease Elective		
Additional Upper-Division Depth Courses - Lecture		
Additional Upper-Division Depth Courses - Laboratory		
Required Courses Outside of the Major		38
Mathematics - Calculus		
Chemistry		
Additional Depth in Chemistry		
Physics		
Advanced College Writing Requirement		
Total Hours		83-87

Course List

Biology/Microbiology Lower-Division Core

Note: The lower-division core should be completed before attempting most upper-division major courses. AP Biology credit with a score of 3 may be substituted for either BIOB 160N/BIOB 161N or BIOB 170N/BIOB 171N.

CODE	TITLE	HOURS
Complete all of the following courses:		
BIOB 160N	Principles of Living Systems	3
BIOB 161N	Prncpls of Living Systems Lab	1
BIOB 170N	Princpls Biological Diversity	3
BIOB 171N	Princpls Biological Dvrsty Lab	2
BIOB 260	Cellular and Molecular Biology	4
BIOB 272	Genetics and Evolution	4
Total Hours		17

Course List

Minimum Required Grade: C-

Upper-Division Core Courses Required by Cellular & Molecular Biology Concentration

CODE	TITLE	HOURS
Complete all of the following courses:		
BCH 480	Advanced Biochemistry I	3
BCH 482	Advanced Biochemistry II	3
BIOB 301	Developmental Biology	3
BIOB 375	General Genetics	3
BIOB 425	Adv Cell & Molecular Biology	3
BIOM 360	General Microbiology	3
BIOM 361	General Microbiology Lab	2
Total Hours		20

Course List

Minimum Required Grade: C-

Additional Upper-Division Major Courses Required for the Cellular & Molecular Biology Concentration

Rule: Complete the following subcategories.

Disease Elective

CODE	TITLE	HOURS
Complete one of the following courses:		3
BIOB 410	Immunology	
BIOM 435	Virology	
Total Hours		3

Course List

Minimum Required Grade: C-

Additional Upper-Division Depth Courses - Lecture

CODE	TITLE	HOURS
Complete one of the following courses:		3-4
BIOB 468	Endocrinology	
BIOB 483	Phylogenics and Evolution	
BIOB 486	Genomics	
BIOL 435	Comparative Animal Physiology	
BIOM 410	Microbial Genetics	
BIOM 450	Microbial Physiology	
BIOO 433 & BIOO 434	Plant Physiology and Plant Physiology Lab	
Total Hours		3-4

Course List

Minimum Required Grade: C-

Additional Upper-Division Depth Courses - Laboratory

CODE	TITLE	HOURS
Complete two of the following courses:		2-5
BCH 486	Biochemistry Research Lab	
BIOB 411	Immunology Laboratory	
BIOM 411	Exprmntl Microbial Genetcs Lab	
BIOM 451	Microbial Physiology Lab	
BIOM 490	Adv Undergrad Research	
Total Hours		2-5

Course List

Minimum Required Grade: C-

Required Courses Outside of the Major

Rule: Complete the following subcategories.

Mathematics - Calculus

CODE	TITLE	HOURS
Complete one of the following courses:		4
M 162	Applied Calculus	
M 171	Calculus I	
Total Hours		4

Course List

Minimum Required Grade: C-

Chemistry

CODE	TITLE	HOURS
Complete all of the following courses:		
CHMY 141N & CHMY 142N	College Chemistry I and College Chemistry I Lab	5
CHMY 143N & CHMY 144N	College Chemistry II and College Chemistry II Lab	5
CHMY 221 & CHMY 222	Organic Chemistry I and Organic Chemistry I Lab	5
CHMY 223 & CHMY 224	Organic Chemistry II and Organic Chemistry II Lab	5
Total Hours		20

Course List

Minimum Required Grade: C-

Additional Depth in Chemistry

CODE	TITLE	HOURS
Complete one of the following courses:		4
CHMY 311	Analytical Chem-Quant Analysis	
CHMY 373	Phys Chem-Kntcs & Thrmdynmcs	
Total Hours		4

Course List

Minimum Required Grade: C-

Physics

CODE	TITLE	HOURS
Complete one of the following Physics sequences:		10
Algebra- and Trigonometry-based Physics:		
PHSX 205N & PHSX 206N	College Physics I and College Physics I Laboratory	
PHSX 207N & PHSX 208N	College Physics II and College Physics II Laboratory	
Calculus-based Physics:		
PHSX 215N & PHSX 216N	Fund of Physics w/Calc I and Physics Laboratory I w/Calc	
PHSX 217N & PHSX 218N	Fund of Physics w/Calc II and Physics Laboratory II w/Calc (require M 171 and M 172)	
Total Hours		10

Course List

Minimum Required Grade: C-

Advanced College Writing Requirement

Rule: To complete the Advanced College Writing Requirement, Biology students complete 2 or 3 partial writing courses (either three 1/3 writing courses or one 1/3 writing course and one 2/3 writing course) or one complete writing course. The Cellular & Molecular Biology concentration requires two 1/3 writing courses: BCH 482 and BIOB 425. The Advanced College Writing Requirement is completed with one additional course, chosen from any of the following.

Minimum Required Grade: C-

1/3 Advanced Writing Courses

CODE	TITLE	HOURS
BCH 482	Advanced Biochemistry II	3
BIOB 410	Immunology	3
BIOB 425	Adv Cell & Molecular Biology	3
BIOB 483	Phylogenics and Evolution	3
BIOE 403	Comparative Vert Anatomy	4
BIOE 409	Behavior & Evolution Discussion	1
BIOE 428	Freshwater Ecology	5
BIOL 484	Plant Evolution	3
BIOM 402	Medical Bacteriology& Mycology	3
BIOO 320	General Botany	5
BIOO 434	Plant Physiology Lab	1
BIOO 470	Ornithology	4
BIOO 475	Mammalogy	4

Course List

Minimum Required Grade: C-

2/3 Advanced Writing Courses

CODE	TITLE	HOURS
BCH 486	Biochemistry Research Lab	3
BCH 499	Senior Thesis/Capstone	3-6
BIOB 411	Immunology Laboratory	2
BIOB 499	Undergraduate Thesis	3-6
BIOE 342	Field Ecology	5
BIOE 371	Gen Ecology Lab (equiv to 271)	2
BIOM 411	Exprmntl Microbial Genetcs Lab	1
BIOM 499	Undergraduate Thesis	3-6

Course List

Minimum Required Grade: C-

Complete Advanced Writing Course

CODE	TITLE	HOURS
BIOH 462	Principles Medical Physiology	3

Course List

Minimum Required Grade: C-

Biology B.S. - Ecology and Organismal Biology

Bachelor of Science - Biology; Ecology and Organismal Biology Concentration

College of Humanities & Sciences

Degree Specific Credits: 71-85

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: The Ecology and Organismal Biology concentration is for students interested in the biology of organisms (plants or animals) or the biology of populations or communities. Course offerings include those from organismal biology, ecology, evolutionary biology, and conservation biology. This concentration is a graduate prep program, and it is designed for students interested in academia or employment with government or environmental consulting agencies. This concentration is also an excellent choice for pre-veterinary students.

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

Course List		
CODE	**TITLE**	**HOURS**
Biology/Microbiology Lower-Division Core		17
Upper-Division Core Courses Required by Ecology & Organismal Biology Concentration		5
Additional Upper-Division Courses Required for the Ecology & Organismal Biology Concentration		21
Organismal Course Requirement		
-Ology Course Requirement		
Specialized Ecology Course Requirement		
Evolution Course Requirement		
Required Courses Outside of the Major		28-42
Mathematics - Calculus		
Mathematics - Statistics		
Chemistry		
Physics		
Advanced College Writing Requirement		
Total Hours		71-85

Biology/Microbiology Lower-Division Core

Note: The lower-division core should be completed before attempting most upper-division major courses. AP Biology credit with a score of 3 may be substituted for either BIOB 160N/BIOB 161N or BIOB 170N/BIOB 171N.

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
BIOB 160N	Principles of Living Systems	3
BIOB 161N	Prncpls of Living Systems Lab	1
BIOB 170N	Princpls Biological Diversity	3
BIOB 171N	Princpls Biological Dvrsty Lab	2
BIOB 260	Cellular and Molecular Biology	4
BIOB 272	Genetics and Evolution	4
Total Hours		17

Minimum Required Grade: C-

Upper-Division Core Courses Required by Ecology & Organismal Biology Concentration

Course List		
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		5
BIOE 370 & BIOE 371	General Ecology and Gen Ecology Lab (equiv to 271)	
BIOE 342	Field Ecology (taken at the Flathead Lake Biological Station)	
Total Hours		5

Minimum Required Grade: C-

Additional Upper-Division Courses Required for the Ecology & Organismal Biology Concentration

Rule: Complete a minimum of 21 credits of upper-division BIOB, BIOE, BIOH, BIOL, BIOM, BIOO, or BCH course, with at least one course from each of the following subcategories. Other recommended courses include BCH 380 or BCH 480-BCH 482. 21 total credits required.

Organismal Course Requirement

Course List		
CODE	**TITLE**	**HOURS**
Complete at least one organismal course (lab must also be taken, if available) from the following list:		3-4
BIOB 301	Developmental Biology	
BIOB 375	General Genetics	
BIOB 468	Endocrinology	
BIOE 403	Comparative Vert Anatomy	
BIOL 435	Comparative Animal Physiology	
BIOO 433 & BIOO 434	Plant Physiology and Plant Physiology Lab	
Total Hours		3-4

Minimum Required Grade: C-

-Ology Course Requirement

Course List		
CODE	**TITLE**	**HOURS**
Complete at least one course with a focus on a group of organisms (lab must also be taken, if available) from the following list:		3-5
BIOM 360 & BIOM 361	General Microbiology and General Microbiology Lab (equiv to 260)	
BIOM 427 & BIOM 428	General Parasitology and General Parasitology Lab	
BIOO 320	General Botany	
BIOO 335	Rocky Mountain Flora	
BIOO 340	Biology and Mgmnt of Fishes	
BIOO 462	Entomology	
BIOO 470	Ornithology	
BIOO 475	Mammalogy	
Total Hours		3-5

Minimum Required Grade: C-

Specialized Ecology Course Requirement

		Course List
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		3-5
BIOE 428	Freshwater Ecology	
BIOE 447	Ecosystem Ecology	
BIOE 448	Terrestrial Plant Ecology	
BIOM 415	Microbial Dvrsty Eclgy & Evltn	
WILD 470	Conserv of Wildlife Populatns	
Flathead Lake Biological Station courses (summer only):		
BIOE 400	Aquatic Microbial Ecology	
BIOE 416	Alpine Ecology	
BIOE 439	Stream Ecology	
BIOE 440	Conservation Ecology	
BIOE 451	Landscape Ecology	
BIOE 453	Ecology of Small & Large Lakes	
BIOE 458	Forest and Grassland Ecol	
Total Hours		3-5

Minimum Required Grade: C-

Evolution Course Requirement

Course List		
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		3
BIOB 480	Conservation Genetics	
BIOB 483	Phylogenics and Evolution	
BIOB 486	Genomics	
BIOE 406	Behavior & Evolution	
BIOL 484	Plant Evolution	
Total Hours		3

Minimum Required Grade: C-

Required Courses Outside of the Major

Mathematics - Calculus

Note: Students should choose M 171 if they plan to take additional calculus courses if they plan to double major or minor in a field that requires more calculus (e.g. astronomy, math, physics, biochemistry, computer science).

Course List		
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		4
M 162	Applied Calculus	
M 171	Calculus I	
Total Hours		4

Minimum Required Grade: C-

Mathematics - Statistics

Note: Students should choose the full year of statistics for graduate preparation in ecology.

Course List		
CODE	**TITLE**	**HOURS**
Complete either one semester or a full year of statistics from the following:		4-8
One Semester:		
STAT 216	Introduction to Statistics	
Full Year:		
STAT 451 & STAT 452	Statistical Methods I and Statistical Methods II	
STAT 457 & STAT 458	Computer Data Analysis I and Computer Data Analysis II	
Total Hours		4-8

Minimum Required Grade: C-

Chemistry

Notes:

- Students who begin in the advanced chemistry sequence may substitute those courses for introductory sequence courses at the discretion of the major advisor.
- Students should choose the advanced sequence for graduate preparation in organismal biology or pre-veterinary medicine.

Course List		
CODE	**TITLE**	**HOURS**
Complete a sequence of general and organic chemistry:		10-20
Introductory Chemistry (10 credits):		
CHMY 121N	Introduction to General Chemistry	
CHMY 123 & CHMY 124	Introduction to Organic and Biochemistry and Introduction to Organic and Biochemistry Lab	
Advanced Chemistry (20 credits):		
CHMY 141N & CHMY 142N	College Chemistry I and College Chemistry I Lab	
CHMY 143N & CHMY 144N	College Chemistry II and College Chemistry II Lab	
CHMY 221 & CHMY 222	Organic Chemistry I and Organic Chemistry I Lab	
CHMY 223 & CHMY 224	Organic Chemistry II and Organic Chemistry II Lab	
Total Hours		10-20

Minimum Required Grade: C-

Physics

Course List		
CODE	**TITLE**	**HOURS**
Complete one of the following Physics sequences:		10
Algebra- and Trigonometry-based Physics:		
PHSX 205N & PHSX 206N	College Physics I and College Physics I Laboratory	
PHSX 207N & PHSX 208N	College Physics II and College Physics II Laboratory	
Calculus-based Physics:		
PHSX 215N & PHSX 216N	Fund of Physics w/Calc I and Physics Laboratory I w/Calc	
PHSX 217N & PHSX 218N	Fund of Physics w/Calc II and Physics Laboratory II w/Calc (require M 171 and M 172)	
Total Hours		10

Minimum Required Grade: C-

Advanced College Writing Requirement

Rule: To complete the Advanced College Writing Requirement, 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) or one complete writing course. The Ecology & Organismal Biology concentration requires one 2/3 writing course (BIOE 371). The Advanced College Writing Requirement is completed with one more course, chosen from any of the following.

1/3 Advanced Writing Courses

Course List		
CODE	**TITLE**	**HOURS**
BCH 482	Advanced Biochemistry II	3
BIOB 410	Immunology	3
BIOB 425	Adv Cell & Molecular Biology	3
BIOB 483	Phylogenics and Evolution	3
BIOE 403	Comparative Vert Anatomy	4
BIOE 409	Behavior & Evolution Discussion	1
BIOE 428	Freshwater Ecology	5
BIOL 484	Plant Evolution	3
BIOM 402	Medical Bacteriology& Mycology	3
BIOO 320	General Botany	5
BIOO 434	Plant Physiology Lab	1
BIOO 470	Ornithology	4
BIOO 475	Mammalogy	4

Minimum Required Grade: C-

2/3 Advanced Writing Courses

Course List		
CODE	**TITLE**	**HOURS**
BCH 486	Biochemistry Research Lab	3
BCH 499	Senior Thesis/Capstone	3-6
BIOB 411	Immunology Laboratory	2
BIOB 499	Undergraduate Thesis	3-6
BIOE 342	Field Ecology	5
BIOE 371	Gen Ecology Lab (equiv to 271)	2
BIOM 411	Exprmntl Microbial Genetcs Lab	1
BIOM 499	Undergraduate Thesis	3-6

Minimum Required Grade: C-

Complete Advanced Writing Course

Course List		
CODE	**TITLE**	**HOURS**
BIOH 462	Principles Medical Physiology	3

Minimum Required Grade: C-

Biology B.S. - Field Ecology < University of Montana

Biology B.S. - Field Ecology

Bachelor of Science - Biology; Field Ecology Concentration

College of Humanities & Sciences

Degree Specific Credits: 71-84

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: The Field Ecology Concentration is for students interested in field-based ecology. Students with this concentration spend one or two summers taking field courses at the Flathead Lake Biological Station. This concentration is a graduate prep program, and is for students interested in academia or employment at a governmental, private, or non-profit agency.

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

CODE	TITLE	HOURS
Biology/Microbiology Lower-Division Core		17
Upper-Division Core Courses Required for the Field Ecology Concentration		5
Additional Upper Division Major Courses Required for the Field Ecology Concentration		8
Evolution Course Requirement		
-Ology Course Requirement		
Ecology Requirement at the Flathead Lake Biological Station		13
Aquatic Emphasis		
Terrestrial Emphasis		
Required Courses Outside of the Major		28-42
Mathematics - Calculus		
Mathematics - Statistics		
Chemistry		
Physics		
Advanced College Writing Requirement		
Total Hours		71-85

Course List

Biology/Microbiology Lower-Division Core

Note: The lower-division core should be completed before attempting most upper-division major courses. AP Biology credit with a score of 3 may be substituted for either BIOB 160N/BIOB 161N or BIOB 170N/BIOB 171N.

CODE	TITLE	HOURS
Complete all of the following courses:		
BIOB 160N	Principles of Living Systems	3
BIOB 161N	Prncpls of Living Systems Lab	1
BIOB 170N	Princpls Biological Diversity	3
BIOB 171N	Princpls Biological Dvrsty Lab	2
BIOB 260	Cellular and Molecular Biology	4
BIOB 272	Genetics and Evolution	4
Total Hours		17

Course List

Minimum Required Grade: C-

Upper-Division Core Courses Required for the Field Ecology Concentration

CODE	TITLE	HOURS
Complete one of the following courses:		5
BIOE 342	Field Ecology (at Flathead Lake Biological Station)	
BIOE 370 & BIOE 371	General Ecology and Gen Ecology Lab (equiv to 271)	
Total Hours		5

Course List

Minimum Required Grade: C-

Additional Upper-Division Major Courses Required for the Field Ecology Concentration

Rule: Complete a minimum of 8 credits of upper-division Biology or Microbiology (BIOB, BIOE, BIOH, BIOL, BIOM, or BIOO), with at least one course from each of the following subcategories. 8 total credits required.

Evolution Course Requirement

CODE	TITLE	HOURS
Complete at least one evolutionary biology course from the following list:		3
BIOB 480	Conservation Genetics	
BIOB 483	Phylogenics and Evolution	
BIOB 486	Genomics	
BIOE 406	Behavior & Evolution	
BIOL 484	Plant Evolution	
Total Hours		3

Course List

Minimum Required Grade: C-

-Ology Course Requirement

CODE	TITLE	HOURS
Complete one of the following courses:		3-5
BIOM 360 & BIOM 361	General Microbiology and General Microbiology Lab (equiv to 260)	
BIOM 427 & BIOM 428	General Parasitology and General Parasitology Lab	
BIOO 320	General Botany	
BIOO 335	Rocky Mountain Flora	
BIOO 340	Biology and Mgmnt of Fishes	
BIOO 462	Entomology	
BIOO 470	Ornithology	
BIOO 475	Mammalogy	
Total Hours		3-5

Course List

Minimum Required Grade: C-

Ecology Requirement at the Flathead Lake Biological Station

Rule: Complete either the Aquatic Emphasis or the Terrestrial Emphasis.

Aquatic Emphasis

CODE	TITLE	HOURS
If choosing the Aquatice Emphasis, complete all of the following courses:		
BIOE 439	Stream Ecology	3
BIOE 440	Conservation Ecology	3
BIOE 451	Landscape Ecology	3
BIOE 453	Ecology of Small & Large Lakes	3
BIOB 494	Seminar in Biology	1
Total Hours		13

Course List

Minimum Required Grade: C-

Terrestrial Emphasis

CODE	TITLE	HOURS
If choosing the Terrestrial Emphasis, complete all of the following courses:		
BIOE 416	Alpine Ecology	3
BIOE 440	Conservation Ecology	3
BIOE 451	Landscape Ecology	3
BIOE 458	Forest and Grassland Ecol	3
BIOB 494	Seminar in Biology	1
Total Hours		13

Course List

Minimum Required Grade: C-

Required Courses Outside of the Major

Mathematics - Calculus

CODE	TITLE	HOURS
Complete one of the following courses:		4
M 162	Applied Calculus	
M 171	Calculus I	
Total Hours		4

Course List

Minimum Required Grade: C-

Mathematics - Statistics

CODE	TITLE	HOURS
Complete either one semester or a full year of statistics from the following:		4-8
One Semester:		
STAT 216	Introduction to Statistics	
Full Year:		
STAT 451 & STAT 452	Statistical Methods I and Statistical Methods II	
STAT 457 & STAT 458	Computer Data Analysis I and Computer Data Analysis II	
Total Hours		4-8

Course List

Minimum Required Grade: C-

Chemistry

Notes:

- Students who begin in the advanced chemistry sequence may substitute those courses for introductory sequence courses at the discretion of the

major advisor.

CODE	TITLE	HOURS
Complete a sequence of general and organic chemistry:		10-20
Introductory Chemistry (10 credits):		
CHMY 121N	Introduction to General Chemistry	
CHMY 123 & CHMY 124	Introduction to Organic and Biochemistry and Introduction to Organic and Biochemistry Lab	
Advanced Chemistry (20 credits):		
CHMY 141N & CHMY 142N	College Chemistry I and College Chemistry I Lab	
CHMY 143N & CHMY 144N	College Chemistry II and College Chemistry II Lab	
CHMY 221 & CHMY 222	Organic Chemistry I and Organic Chemistry I Lab	
CHMY 223 & CHMY 224	Organic Chemistry II and Organic Chemistry II Lab	
Total Hours		10-20

Course List

Minimum Required Grade: C-

Physics

CODE	TITLE	HOURS
Complete one of the following Physics sequences:		10
Algebra- and Trigonometry-based Physics:		
PHSX 205N & PHSX 206N	College Physics I and College Physics I Laboratory	
PHSX 207N & PHSX 208N	College Physics II and College Physics II Laboratory	
Calculus-based Physics:		
PHSX 215N & PHSX 216N	Fund of Physics w/Calc I and Physics Laboratory I w/Calc	
PHSX 217N & PHSX 218N	Fund of Physics w/Calc II and Physics Laboratory II w/Calc (require M 171 and M 172)	
Total Hours		10

Course List

Minimum Required Grade: C-

Advanced College Writing Requirement

Rule: To complete the Advanced College Writing Requirement, 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) or one complete writing course. The Field Ecology concentration requires BIOE 371 or BIOE 342 (both 2/3 writing courses). The Advanced College Writing Requirement is completed with one additional course, chosen from any of the following.

1/3 Advanced Writing Courses

CODE	TITLE	HOURS
BCH 482	Advanced Biochemistry II	3
BIOB 410	Immunology	3
BIOB 425	Adv Cell & Molecular Biology	3
BIOB 483	Phylogenics and Evolution	3
BIOE 403	Comparative Vert Anatomy	4
BIOE 409	Behavior & Evolution Discussion	1
BIOE 428	Freshwater Ecology	5
BIOL 484	Plant Evolution	3
BIOM 402	Medical Bacteriology& Mycology	3
BIOO 320	General Botany	5
BIOO 434	Plant Physiology Lab	1
BIOO 470	Ornithology	4
BIOO 475	Mammalogy	4

Course List

Minimum Required Grade: C-

2/3 Advanced Writing Courses

CODE	TITLE	HOURS
BCH 486	Biochemistry Research Lab	3
BCH 499	Senior Thesis/Capstone	3-6
BIOB 411	Immunology Laboratory	2
BIOB 499	Undergraduate Thesis	3-6
BIOE 342	Field Ecology	5
BIOE 371	Gen Ecology Lab (equiv to 271)	2
BIOM 411	Exprmntl Microbial Genetcs Lab	1
BIOM 499	Undergraduate Thesis	3-6

Course List

Minimum Required Grade: C-

Complete Advanced Writing Course

CODE	TITLE	HOURS
BIOH 462	Principles Medical Physiology	3

Course List

Minimum Required Grade: C-

Biology B.S. - Genetics and Evolution < University of Montana

Biology B.S. - Genetics and Evolution

Bachelor of Science - Biology; Genetics and Evolution Concentration

College of Humanities & Sciences

Degree Specific Credits: 72-90

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: The Genetics and Evolution concentration is for students interested in genetics and evolutionary biology, including molecular genetics, population genetics, ecological genetics, and genomics. This concentration 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 concentration for students interested in a professional health program such as medical school or a genetic counseling graduate program.

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

CODE	TITLE	HOURS
Biology/Microbiology Lower-Division Core		17
Upper-Division Core Courses Required by the Genetics & Evolution Concentration		11
Additional Upper-Division Courses Required for the Genetics & Evolution Concentration		16-20
Biochemistry		
Genetics/Evolution Depth Courses		
Physiology Requirement		
Required Courses Outside of the Major		28-42
Mathematics - Calculus		
Mathematics - Statistics		
Chemistry		
Physics		
Advanced College Writing Requirement		
Total Hours		72-90

Course List

Biology/Microbiology Lower-Division Core

Note: The lower division core should be completed before attempting most upper division major courses. AP Biology credit with a score of 3 may be substituted for either BIOB 160N/BIOB 161N or BIOB 170N/BIOB 171N.

CODE	TITLE	HOURS
Complete all of the following courses:		
BIOB 160N	Principles of Living Systems	3
BIOB 161N	Prncpls of Living Systems Lab	1
BIOB 170N	Princpls Biological Diversity	3
BIOB 171N	Princpls Biological Dvrsty Lab	2
BIOB 260	Cellular and Molecular Biology	4
BIOB 272	Genetics and Evolution	4
Total Hours		17

Course List

Minimum Required Grade: C-

Upper-Division Core Courses Required by the Genetics & Evolution Concentration

CODE	TITLE	HOURS
Complete all of the following courses:		
BIOB 375	General Genetics	3
BIOB 486	Genomics	3
BIOE 370	General Ecology	3
BIOE 371	Gen Ecology Lab (equiv to 271)	2
Total Hours		11

Course List

Minimum Required Grade: C-

Additional Upper-Division Courses Required for the Genetics & Evolution Concentration

Biochemistry

Note: If introductory chemistry is completed, then BCH 380 must be taken. Either BCH 380 or BCH 480-BCH 482 may be taken if the advanced chemistry sequence is completed.

CODE	TITLE	HOURS
Complete one of the following courses:		4-6
BCH 380	Biochemistry	
BCH 480 & BCH 482	Advanced Biochemistry I and Advanced Biochemistry II	
Total Hours		4-6

Course List

Minimum Required Grade: C-

Genetics/Evolution Depth Courses

CODE	TITLE	HOURS
Complete three of the following courses:		9-10
BIOB 480	Conservation Genetics	
BIOB 483	Phylogenics and Evolution	
BIOB 488	Programming for Biology	
BIOE 403	Comparative Vert Anatomy	
BIOE 406	Behavior & Evolution	
BIOL 484	Plant Evolution	
BIOM 410	Microbial Genetics	
BIOM 415	Microbial Dvrsty Eclgy & Evltn	
CSCI 451	Computational Biology	
Total Hours		9-10

Course List

Minimum Required Grade: C-

Physiology Requirement

CODE	TITLE	HOURS
Complete one of the following courses (labs must be taken if available):		3-4
BIOB 425	Adv Cell & Molecular Biology	
BIOL 435	Comparative Animal Physiology	
BIOM 450 & BIOM 451	Microbial Physiology and Microbial Physiology Lab	
BIOO 433 & BIOO 434	Plant Physiology and Plant Physiology Lab	
Total Hours		3-4

Course List

Minimum Required Grade: C-

Required Courses Outside of the Major

Mathematics - Calculus

Note: Student should choose M 171 if they plan to take additional calculus courses or if they plan to double major or minor in a field that requires more calculus (e.g. astronomy, math, physics, biochemistry, computer science).

CODE	TITLE	HOURS
Complete one of the following courses:		4
M 162	Applied Calculus	
M 171	Calculus I	
Total Hours		4

Course List

Minimum Required Grade: C-

Mathematics - Statistics

CODE	TITLE	HOURS
Complete either one semester or a full year of statistics from the following:		4-8
One Semester:		
STAT 216	Introduction to Statistics	
Full Year:		
STAT 451 & STAT 452	Statistical Methods I and Statistical Methods II	
STAT 457 & STAT 458	Computer Data Analysis I and Computer Data Analysis II	
Total Hours		4-8

Course List

Minimum Required Grade: C-

Chemistry

Notes:

- Students who begin in the advanced chemistry sequence may substitute those courses for introductory sequence courses at the discretion of the major advisor.
- Students should choose the advanced sequence for graduate preparation.

CODE	TITLE	HOURS
Complete a sequence of general and organic chemistry:		10-20
Introductory Chemistry (10 credits):		
CHMY 121N	Introduction to General Chemistry	
CHMY 123 & CHMY 124	Introduction to Organic and Biochemistry and Introduction to Organic and Biochemistry Lab	
Advanced Chemistry (20 credits):		
CHMY 141N & CHMY 142N	College Chemistry I and College Chemistry I Lab	
CHMY 143N & CHMY 144N	College Chemistry II and College Chemistry II Lab	
CHMY 221 & CHMY 222	Organic Chemistry I and Organic Chemistry I Lab	
CHMY 223 & CHMY 224	Organic Chemistry II and Organic Chemistry II Lab	
Total Hours		10-20

Course List

Minimum Required Grade: C-

Physics

CODE	TITLE	HOURS
Complete one of the following Physics sequences:		10
Algebra- and Trigonometry-based Physics:		
PHSX 205N & PHSX 206N	College Physics I and College Physics I Laboratory	
PHSX 207N & PHSX 208N	College Physics II and College Physics II Laboratory	
Calculus-based Physics:		
PHSX 215N & PHSX 216N	Fund of Physics w/Calc I and Physics Laboratory I w/Calc	
PHSX 217N & PHSX 218N	Fund of Physics w/Calc II and Physics Laboratory II w/Calc (require M 171 and M 172)	
Total Hours		10

Course List

Minimum Required Grade: C-

Advanced College Writing Requirement

Rule: To complete the Advanced College Writing Requirement, 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) or one complete writing course. The Genetics & Evolution concentration requires one 2/3 writing course: BIOE 371. The Advanced College Writing Requirement is completed with one additional course, chosen from any of the following.

1/3 Advanced Writing Courses

CODE	TITLE	HOURS
BCH 482	Advanced Biochemistry II	3
BIOB 410	Immunology	3
BIOB 425	Adv Cell & Molecular Biology	3
BIOB 483	Phylogenics and Evolution	3
BIOE 403	Comparative Vert Anatomy	4
BIOE 409	Behavior & Evolution Discussion	1
BIOE 428	Freshwater Ecology	5
BIOL 484	Plant Evolution	3
BIOM 402	Medical Bacteriology& Mycology	3
BIOO 320	General Botany	5
BIOO 434	Plant Physiology Lab	1
BIOO 470	Ornithology	4
BIOO 475	Mammalogy	4

Course List

Minimum Required Grade: C-

2/3 Advanced Writing Courses

CODE	TITLE	HOURS
BCH 486	Biochemistry Research Lab	3
BCH 499	Senior Thesis/Capstone	3-6
BIOB 411	Immunology Laboratory	2
BIOB 499	Undergraduate Thesis	3-6
BIOE 342	Field Ecology	5
BIOE 371	Gen Ecology Lab (equiv to 271)	2
BIOM 411	Exprmntl Microbial Genetcs Lab	1
BIOM 499	Undergraduate Thesis	3-6

Course List

Minimum Required Grade: C-

Complete Advanced Writing Course

CODE	TITLE	HOURS
BIOH 462	Principles Medical Physiology	3

Course List

Minimum Required Grade: C-

Biology B.S. - Human Biological Sciences

Bachelor of Science - Biology; Human Biological Sciences Concentration

College of Humanities & Sciences

Degree Specific Credits: 72-90

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: The Human Biological Sciences concentration 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.

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

Course List		
CODE	**TITLE**	**HOURS**
Biology/Microbiology Lower-Division Core		17
Upper-Division Core Courses Required by Human Biological Sciences Concentration		17
Additional Upper-Division Courses Required for the Human Biological Sciences Concentration		10-14
Biochemistry Requirement		
Microbiology Requirement		
Additional Depth in Human Biological Sciences		
Required Courses Outside of the major		28-42
Mathematics and Psychology		
Chemistry		
Physics		
Advanced College Writing Requirement		
Total Hours		72-90

Biology/Microbiology Lower Division Core

Note: The lower division core should be completed before attempting most upper division major courses. AP Biology credit with a score of 3 may be substituted for either BIOB 160N/BIOB 161N or BIOB 170N/BIOB 171N.

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
BIOB 160N	Principles of Living Systems	3
BIOB 161N	Prncpls of Living Systems Lab	1
BIOB 170N	Princpls Biological Diversity	3
BIOB 171N	Princpls Biological Dvrsty Lab	2
BIOB 260	Cellular and Molecular Biology	4
BIOB 272	Genetics and Evolution	4
Total Hours		17

Minimum Required Grade: C-

Upper-Division Core Courses Required by Human Biological Sciences Concentration

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
BIOB 301	Developmental Biology	3
BIOB 375	General Genetics	3
BIOH 365 & BIOH 366	Human Anatomy and Physiology for Health Professions I and Human Anatomy and Physiology for Health Professions I Laboratory	4
BIOH 370 & BIOH 371	Human Anatomy and Physiology for Health Professions II and Human Anatomy and Physiology for Health Professions II Laboratory	4
BIOM 360	General Microbiology	3
Total Hours		17

Minimum Required Grade: C-

Additional Upper-Division Courses Required for the Human Biological Sciences Concentration

Biochemistry Requirement

Note: If introductory chemistry is completed, thenBCH 380 must be taken. Either BCH 380BCH 380 or BCH 480BCH 480/BCH 482BCH 482 may be taken if the advanced chemistry sequence is completed.

Course List		
CODE	**TITLE**	**HOURS**
Complete one of the following sequences:		4-6
One Semester:		
BCH 380	Biochemistry	
Full Year:		
BCH 480	Advanced Biochemistry I	
BCH 482	Advanced Biochemistry II	
Total Hours		4-6

Minimum Required Grade: C-

Additional Depth in Human Biological Sciences

		Course List
CODE	**TITLE**	**HOURS**
Complete two of the following courses:		6-8
BCH 486	Biochemistry Research Lab	
BIOB 410	Immunology	
BIOB 425	Adv Cell & Molecular Biology	
BIOB 468	Endocrinology	
BIOB 483	Phylogenics and Evolution	
BIOB 486	Genomics	
BIOB 499	Undergraduate Thesis	
BIOE 403	Comparative Vert Anatomy	
BIOE 406	Behavior & Evolution	
BIOH 405	Hematology	
BIOH 462	Principles Medical Physiology	
BIOL 435	Comparative Animal Physiology	
BIOM 402	Medical Bacteriology& Mycology	
BIOM 410	Microbial Genetics	
BIOM 427 & BIOM 428	General Parasitology and General Parasitology Lab	
BIOM 435	Virology	
BIOM 450	Microbial Physiology	
Total Hours		6-8

Minimum Required Grade: C-

Required Courses Outside of the Major

Minimum Required Grade: C-

Mathematics and Psychology

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
M 162	Applied Calculus	4
or M 171	Calculus I	
PSYX 100S	Intro to Psychology	3
STAT 216	Introduction to Statistics	4
Total Hours		11

Minimum Required Grade: C-

Chemistry

Notes:

- Students who begin in the advanced chemistry sequence may substitute those courses for introductory sequence courses at the discretion of the major advisor.
- If students plan to apply to a graduate or professional school such as medical or dental, they should plan to complete the advanced chemistry sequence. If they plan to pursue nursing or a graduate program in physical therapy, the introductory chemistry sequence is most likely sufficient. The advanced chemistry option is more flexible, and keeps more options open for future careers. Check the requirements of your intended professional program to help determine which sequence is most appropriate.

Course List		
CODE	**TITLE**	**HOURS**
Complete a sequence of general and organic chemistry:		10-20
Introductory Chemistry (10 credits):		
CHMY 121N	Introduction to General Chemistry	
CHMY 123 & CHMY 124	Introduction to Organic and Biochemistry and Introduction to Organic and Biochemistry Lab	
Advanced Chemistry (20 credits):		
CHMY 141N & CHMY 142N	College Chemistry I and College Chemistry I Lab	
CHMY 143N & CHMY 144N	College Chemistry II and College Chemistry II Lab	
CHMY 221 & CHMY 222	Organic Chemistry I and Organic Chemistry I Lab	
CHMY 223 & CHMY 224	Organic Chemistry II and Organic Chemistry II Lab	
Total Hours		10-20

Minimum Required Grade: C-

Physics

Course List		
CODE	**TITLE**	**HOURS**
Complete one of the following Physics sequences:		10
Algebra- and Trigonometry-based Physics:		
PHSX 205N & PHSX 206N	College Physics I and College Physics I Laboratory	
PHSX 207N & PHSX 208N	College Physics II and College Physics II Laboratory	
Calculus-based Physics:		
PHSX 215N & PHSX 216N	Fund of Physics w/Calc I and Physics Laboratory I w/Calc	
PHSX 217N & PHSX 218N	Fund of Physics w/Calc II and Physics Laboratory II w/Calc (require M 171 and M 172)	
Total Hours		10

Minimum Required Grade: C-

Advanced College Writing Requirement

Rule: To complete the Advanced College Writing Requirement, 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) or one complete writing course. The Human Biological Sciences concentration does not require a specific advanced writing course.

1/3 Advanced Writing Courses

Course List		
CODE	**TITLE**	**HOURS**
BCH 482	Advanced Biochemistry II	3
BIOB 410	Immunology	3
BIOB 425	Adv Cell & Molecular Biology	3
BIOB 483	Phylogenics and Evolution	3
BIOE 403	Comparative Vert Anatomy	4
BIOE 409	Behavior & Evolution Discussion	1
BIOE 428	Freshwater Ecology	5
BIOL 484	Plant Evolution	3
BIOM 402	Medical Bacteriology& Mycology	3
BIOO 320	General Botany	5
BIOO 434	Plant Physiology Lab	1
BIOO 470	Ornithology	4
BIOO 475	Mammalogy	4

Minimum Required Grade: C-

2/3 Advanced Writing Courses

Course List		
CODE	**TITLE**	**HOURS**
BCH 486	Biochemistry Research Lab	3
BCH 499	Senior Thesis/Capstone	3-6
BIOB 411	Immunology Laboratory	2
BIOB 499	Undergraduate Thesis	3-6
BIOE 342	Field Ecology	5
BIOE 371	Gen Ecology Lab (equiv to 271)	2
BIOM 411	Exprmntl Microbial Genetcs Lab	1
BIOM 499	Undergraduate Thesis	3-6

Minimum Required Grade: C-

Complete UD Writing Course

Course List		
CODE	**TITLE**	**HOURS**
BIOH 462	Principles Medical Physiology	3

Minimum Required Grade: C-

Biology Minor < University of Montana

Biology Minor

Minor - Biology

College of Humanities & Sciences

Degree Specific Credits: 25

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Summary

CODE	TITLE	HOURS
Biology/Microbiology Lower-Division Core		17
Upper-Division Biology Requirement for the Minor		8
Teaching Biology Track		
Total Hours		25

Course List

Biology/Microbiology Lower-Division Core

Note: The lower-division core should be completed before attempting most upper division BIO- courses. AP Biology credit with a score of 3 may be substituted for either BIOB 160N/BIOB 161N or BIOB 170N/BIOB 171N.

CODE	TITLE	HOURS
Complete all of the following courses:		
BIOB 160N	Principles of Living Systems	3
BIOB 161N	Prncpls of Living Systems Lab	1
BIOB 170N	Princpls Biological Diversity	3
BIOB 171N	Princpls Biological Dvrsty Lab	2
BIOB 260	Cellular and Molecular Biology	4
BIOB 272	Genetics and Evolution	4
Total Hours		17

Course List

Minimum Required Grade: C-

Upper-Division Biology Requirement for the Minor

Note: These eight credits may not include BIOC, BCH, or BIOM courses.

CODE	TITLE	HOURS
Complete 8 credits in courses with the following rubrics:		8
BIOB		
BIOE		
BIOH		
BIOL		
BIOO		
Total Hours		8

Course List

Minimum Required Grade: C-

Teaching Biology Track

Notes:

- This teaching track contains different/additional course requirements designed to meet state standards. Those interested in teaching in K-12 schools must complete the teaching track of a major in a teaching content area plus the Teacher Education Program through the Department of Teaching and Learning. Additional teaching areas can be added through completion of the teaching track of a major or minor in that content area.
  - Secondary Education Licensure Program
  - Licensure Degree Requirements
- To complete this teaching track, you need to contact the Teaching and Learning Department. You do not fill out a major/minor form for graduation or the major/minor/concentration section of the major change form. Approvals for this track must come from the Teaching and Learning Department.
- Tracks will not appear on your UM transcript, diploma, university lists, student data system, or university publications. They are used for advising purposes only. You do not fill out a major change for a track.
- Individuals completing the teaching track of this minor must also complete the teaching track of a major in another teaching content area.

Upper-Division Core Courses Required by the Biology Teaching Track

CODE	TITLE	HOURS
Complete all of the following courses:		
BIOM 360	General Microbiology	3
BIOM 361	General Microbiology Lab	2
Total Hours		5

Course List

Minimum Required Grade: C-

Required Content Courses Outside of the Major

Mathematics - Calculus

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).

CODE	TITLE	HOURS
Complete one of the following courses:		4
M 162	Applied Calculus	
M 171	Calculus I	
Total Hours		4

Course List

Minimum Required Grade: C-

Mathematics - Statistics

CODE	TITLE	HOURS
Complete the following course:		
STAT 216	Introduction to Statistics	4
Total Hours		4

Course List

Minimum Required Grade: C-

Chemistry

CODE	TITLE	HOURS
Complete all of the following courses:		
CHMY 121N	Introduction to General Chemistry	4
CHMY 123	Introduction to Organic and Biochemistry	4
CHMY 485	Laboratory Safety	1
Total Hours		9

Course List

Minimum Required Grade: C-

Environmental Geosciences

CODE	TITLE	HOURS
Complete one of the following courses:		3
GEO 103N	Introduction to Environmental Geology	
GEO 105N	Oceanography	
Total Hours		3

Course List

Minimum Required Grade: C-

Education

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.

CODE	TITLE	HOURS
Complete the following course:		
EDU 497	Teaching and Assessing	4
Total Hours		4

Course List

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. For more information, see the Teaching and Learning Department.

Medical Laboratory Science B.S. < University of Montana

Medical Laboratory Science B.S.

Bachelor of Science - Medical Laboratory Science

College of Humanities & Sciences

Degree Specific Credits: 86 (4+1), 99 (3+1)

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: A Medical Laboratory Science 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.

General Education Requirement

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

CODE	TITLE	HOURS
Lower-Division Biology Courses		8
Required Courses Outside the Major		8
Tracks		70-83
4 + 1 Track		
3 + 1 Track		
Advanced College Writing Requirement		
Total Hours		86-99

Course List

Lower Division Biology Courses

Note: Either BIOB 160N (C- or better) or BCH 110/BCH 111 (C- or better) or BIOH 112 (B- or better) must be taken as a prerequisite for BIOB 260, unless a student has AP Biology credit.

CODE	TITLE	HOURS
Complete all of the following courses:		
BIOB 260	Cellular and Molecular Biology	4
BIOB 272	Genetics and Evolution	4
Total Hours		8

Course List

Minimum Required Grade: C-

Required Courses Outside the Major

Mathematics - Calculus

CODE	TITLE	HOURS
Complete one of the following courses:		4
M 162	Applied Calculus	
M 171	Calculus I	
Total Hours		4

Course List

Minimum Required Grade: C-

Mathematics - Statistics

CODE	TITLE	HOURS
Complete the following course:		
STAT 216	Introduction to Statistics	4
Total Hours		4

Course List

Minimum Required Grade: C-

Medical Laboratory Science; Track: 4 + 1

Note: 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.

Required Major Courses for Medical Laboratory Science 4 + 1 Track

CODE	TITLE	HOURS
Complete all of the following courses:		
BCH 380	Biochemistry	4
BIOB 410	Immunology	3
BIOB 411	Immunology Laboratory	2
BIOH 365 & BIOH 366	Human Anatomy and Physiology for Health Professions I and Human Anatomy and Physiology for Health Professions I Laboratory	4
BIOH 405	Hematology	3
BIOM 360	General Microbiology	3
BIOM 361	General Microbiology Lab	2
BIOM 402	Medical Bacteriology& Mycology	3
BIOM 403	Medicl Bacteriolgy & Myclgy Lb	2
BIOM 407	Clinical Diagnosis	2
BIOM 408	Clinical Diagnosis Lab	1
BIOM 427	General Parasitology	2
BIOM 428	General Parasitology Lab	2
BIOM 435	Virology	3
Total Hours		36

Course List

Minimum Required Grade: C-

Chemistry

CODE	TITLE	HOURS
Complete all of the following courses:		
CHMY 141N & CHMY 142N	College Chemistry I and College Chemistry I Lab	5
CHMY 143N & CHMY 144N	College Chemistry II and College Chemistry II Lab	5
CHMY 221 & CHMY 222	Organic Chemistry I and Organic Chemistry I Lab	5
CHMY 223 & CHMY 224	Organic Chemistry II and Organic Chemistry II Lab	5
CHMY 311	Analytical Chem-Quant Analysis	4
Total Hours		24

Course List

Minimum Required Grade: C-

Physics

CODE	TITLE	HOURS
Complete one of the following Physics sequences:		10
Algebra- and Trigonometry-based Physics:		
PHSX 205N & PHSX 206N	College Physics I and College Physics I Laboratory	
PHSX 207N & PHSX 208N	College Physics II and College Physics II Laboratory	
Calculus-based Physics:		
PHSX 215N & PHSX 216N	Fund of Physics w/Calc I and Physics Laboratory I w/Calc	
PHSX 217N & PHSX 218N	Fund of Physics w/Calc II and Physics Laboratory II w/Calc	
Total Hours		10

Course List

Minimum Required Grade: C-

Medical Laboratory Science; Track: 3 + 1

Note: 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 Montana University System Medical Laboratory Training 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.

Required Major Courses for Medical Laboratory Science 3 + 1

CODE	TITLE	HOURS
Complete all of the following courses:		
BCH 380	Biochemistry	4
BIOB 410	Immunology	3
BIOH 365 & BIOH 366	Human Anatomy and Physiology for Health Professions I and Human Anatomy and Physiology for Health Professions I Laboratory	4
BIOH 405	Hematology	3
BIOM 360	General Microbiology	3
BIOM 361	General Microbiology Lab	2
BIOM 402	Medical Bacteriology& Mycology	3
BIOM 403	Medicl Bacteriolgy & Myclgy Lb	2
BIOM 427	General Parasitology	2
BIOM 428	General Parasitology Lab	2
BIOM 435	Virology	3
Total Hours		31

Course List

Minimum Required Grade: C-

Required Professional Practicum

Note: The student must apply for the professional practicum to one of our affiliated programs during the autumn prior to enrollment. To be competitive for this practicum, a student 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 the Medical Laboratory Sciences website. Contact Dr. Mike Minnick to apply for the practicum.

CODE	TITLE	HOURS
Complete all of the following courses:		
BIOH 470	Summer Clinical Laboratory	12
BIOH 471	Professional Training I	13
BIOH 472	Professional Training II	12
Total Hours		37

Course List

Minimum Required Grade: C-

Chemistry

CODE	TITLE	HOURS
Complete all of the following courses:		
CHMY 141N & CHMY 142N	College Chemistry I and College Chemistry I Lab	5
CHMY 143N & CHMY 144N	College Chemistry II and College Chemistry II Lab	5
CHMY 221 & CHMY 222	Organic Chemistry I and Organic Chemistry I Lab	5
Total Hours		15

Course List

Minimum Required Grade: C-

Advanced College Writing Requirement

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 or one complete writing course).
- To meet the Advanced College Writing Requirement, Medical Laboratory Science 4+1 students take BIOB 410 (a 1/3 writing course) and BIOB 411 (a 2/3 writing course).
- To meet the Advanced College Writing Requirement, Medical Laboratory Science 3+1 students take two 1/3 writing courses (BIOB 410 and BIOM 402). The Advanced College Writing Requirement is completed with one more course, chosen from any of the following. (BIOB 411 is recommended by clinical practicum programs).

1/3 Advanced Writing Courses

CODE	TITLE	HOURS
BCH 482	Advanced Biochemistry II	3
BIOB 410	Immunology	3
BIOB 425	Adv Cell & Molecular Biology	3
BIOB 483	Phylogenics and Evolution	3
BIOE 403	Comparative Vert Anatomy	4
BIOE 409	Behavior & Evolution Discussion	1
BIOE 428	Freshwater Ecology	5
BIOL 484	Plant Evolution	3
BIOM 402	Medical Bacteriology& Mycology	3
BIOO 320	General Botany	5
BIOO 434	Plant Physiology Lab	1
BIOO 470	Ornithology	4
BIOO 475	Mammalogy	4

Course List

Minimum Required Grade: C-

2/3 Advanced Writing Courses

CODE	TITLE	HOURS
BCH 486	Biochemistry Research Lab	3
BCH 499	Senior Thesis/Capstone	3-6
BIOB 411	Immunology Laboratory (recommended)	2
BIOB 499	Undergraduate Thesis	3-6
BIOE 342	Field Ecology	5
BIOE 371	Gen Ecology Lab (equiv to 271)	2
BIOM 411	Exprmntl Microbial Genetcs Lab	1
BIOM 499	Undergraduate Thesis	3-6

Course List

Minimum Required Grade: C-

Complete Advanced Writing Course

CODE	TITLE	HOURS
BIOH 462	Principles Medical Physiology	3

Course List

Minimum Required Grade: C-

Microbiology B.S. < University of Montana

Microbiology B.S.

Bachelor of Science - Microbiology

College of Humanities & Sciences

Degree Specific Credits: 91

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: Microbiology is the study of microorganisms including bacteria, fungi, viruses, and protozoa. This general microbiology concentration 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 concentration for pre-medical sciences students.

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

CODE	TITLE	HOURS
Biology/Microbiology Lower-Division Core		17
Upper-Division Microbiology Core Courses		16
Additional Upper-Division Major Courses Required for Microbiology		16
Biochemistry		
Additional Upper-Division Depth Courses in Microbiology		
Required Courses Outside of the Major		42
Mathematics		
Chemistry		
Physics		
Advanced College Writing Requirement		
Total Hours		91

Course List

Biology/Microbiology Lower-Division Core

Note: The lower-division core should be completed before attempting most upper-division major courses. AP Biology credit with a score of 3 may be substituted for either BIOB 160N/BIOB 161N or BIOB 170N/BIOB 171N.

CODE	TITLE	HOURS
Complete all of the following courses:		
BIOB 160N	Principles of Living Systems	3
BIOB 161N	Prncpls of Living Systems Lab	1
BIOB 170N	Princpls Biological Diversity	3
BIOB 171N	Princpls Biological Dvrsty Lab	2
BIOB 260	Cellular and Molecular Biology	4
BIOB 272	Genetics and Evolution	4
Total Hours		17

Course List

Minimum Required Grade: C-

Upper-Division Microbiology Core Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
BIOM 360	General Microbiology	3
BIOM 361	General Microbiology Lab	2
BIOM 410	Microbial Genetics	3
BIOM 411	Exprmntl Microbial Genetcs Lab	1
BIOM 415	Microbial Dvrsty Eclgy & Evltn	3
BIOM 450	Microbial Physiology	3
BIOM 451	Microbial Physiology Lab	1
Total Hours		16

Course List

Minimum Required Grade: C-

Additional Upper-Division Courses Required for Microbiology

Biochemistry

CODE	TITLE	HOURS
Complete either one semester or one year of Biochemistry courses:		4-6
One Semester:		
BCH 380	Biochemistry	
One Year:		
BCH 480	Advanced Biochemistry I	
BCH 482	Advanced Biochemistry II	
Total Hours		4-6

Course List

Minimum Required Grade: C-

Additional Upper-Division Depth Courses in Microbiology

CODE	TITLE	HOURS
Complete 10-12 credits from the following courses (labs must be taken if available). 10 credits if BCH 480-482 was taken; 12 credits if BCH 380 was taken.		10-12
BIOB 410 & BIOB 411	Immunology and Immunology Laboratory	
BIOB 483	Phylogenics and Evolution	
BIOE 370	General Ecology	
BIOH 405	Hematology	
BIOM 402 & BIOM 403	Medical Bacteriology& Mycology and Medicl Bacteriolgy & Myclgy Lb	
BIOM 407 & BIOM 408	Clinical Diagnosis and Clinical Diagnosis Lab	
BIOM 427 & BIOM 428	General Parasitology and General Parasitology Lab	
BIOM 435	Virology	
BIOM 490	Adv Undergrad Research	
Total Hours		10-12

Course List

Minimum Required Grade: C-

Required Courses Outside of the Major

Mathematics

CODE	TITLE	HOURS
Complete one of the following courses:		4
M 162	Applied Calculus	
M 171	Calculus I	
Total Hours		4

Course List

Minimum Required Grade: C-

Statistics

CODE	TITLE	HOURS
Complete the following course:		
STAT 216	Introduction to Statistics	4
Total Hours		4

Course List

Minimum Required Grade: C-

Chemistry

CODE	TITLE	HOURS
Complete all of the following courses:		
CHMY 141N & CHMY 142N	College Chemistry I and College Chemistry I Lab	5
CHMY 143N & CHMY 144N	College Chemistry II and College Chemistry II Lab	5
CHMY 221 & CHMY 222	Organic Chemistry I and Organic Chemistry I Lab	5
CHMY 223 & CHMY 224	Organic Chemistry II and Organic Chemistry II Lab	5
CHMY 311	Analytical Chem-Quant Analysis	4
Total Hours		24

Course List

Minimum Required Grade: C-

Physics

CODE	TITLE	HOURS
Complete one of the following Physics sequences:		10
Algebra- and Trigonometry-based Physics:		
PHSX 205N & PHSX 206N	College Physics I and College Physics I Laboratory	
PHSX 207N & PHSX 208N	College Physics II and College Physics II Laboratory	
Calculus-based Physics:		
PHSX 215N & PHSX 216N	Fund of Physics w/Calc I and Physics Laboratory I w/Calc	
PHSX 217N & PHSX 218N	Fund of Physics w/Calc II and Physics Laboratory II w/Calc	
Total Hours		10

Course List

Minimum Required Grade: C-

Advanced College Writing Requirement

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 or one complete writing course). The Microbiology degree requires one 2/3 writing course (BIOM 411). The Advanced College Writing Requirement is completed with one more course, chosen from any of the following.

1/3 Advanced Writing Courses

CODE	TITLE	HOURS
BCH 482	Advanced Biochemistry II	3
BIOB 410	Immunology	3
BIOB 425	Adv Cell & Molecular Biology	3
BIOB 483	Phylogenics and Evolution	3
BIOE 403	Comparative Vert Anatomy	4
BIOE 409	Behavior & Evolution Discussion	1
BIOE 428	Freshwater Ecology	5
BIOL 484	Plant Evolution	3
BIOM 402	Medical Bacteriology& Mycology	3
BIOO 320	General Botany	5
BIOO 434	Plant Physiology Lab	1
BIOO 470	Ornithology	4
BIOO 475	Mammalogy	4

Course List

Minimum Required Grade: C-

2/3 Advanced Writing Courses

CODE	TITLE	HOURS
BCH 486	Biochemistry Research Lab	3
BCH 499	Senior Thesis/Capstone	3-6
BIOB 411	Immunology Laboratory	2
BIOB 499	Undergraduate Thesis	3-6
BIOE 342	Field Ecology	5
BIOE 371	Gen Ecology Lab (equiv to 271)	2
BIOM 411	Exprmntl Microbial Genetcs Lab	1
BIOM 499	Undergraduate Thesis	3-6

Course List

Minimum Required Grade: C-

Complete Advanced Writing Course

CODE	TITLE	HOURS
BIOH 462	Principles Medical Physiology	3

Course List

Minimum Required Grade: C-

Microbiology B.S. - Microbial Ecology < University of Montana

Microbiology B.S. - Microbial Ecology

Bachelor of Science - Microbiology; Microbial Ecology Concentration

College of Humanities & Sciences

Degree Specific Credits: 78-88

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: Microbiology is the study of microorganisms including bacteria, fungi, viruses, and protozoa. The concentration 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.

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

CODE	TITLE	HOURS
Biology/Microbiology Lower-Division Core		17
Upper-Division Microbiology Core Courses		19
Additional Upper-Division Courses Required for Microbial Ecology Concentration		13
Biochemistry		
Additional Upper-Division Depth Courses in Microbiology		
Required Courses Outside of the Major		29-39
Mathematics - Calculus		
Mathematics - Statistics		
Chemistry		
Physics		
Additional Science Requirement		
Advanced College Writing Requirement		
Total Hours		78-88

Course List

Biology/Microbiology Lower-Division Core

Note: The lower division core should be completed before attempting most upper division major courses. AP Biology credit with a score of 3 may be substituted for either BIOB 160N/BIOB 161N or BIOB 170N/BIOB 171N.

CODE	TITLE	HOURS
Complete all of the following courses:		
BIOB 160N	Principles of Living Systems	3
BIOB 161N	Prncpls of Living Systems Lab	1
BIOB 170N	Princpls Biological Diversity	3
BIOB 171N	Princpls Biological Dvrsty Lab	2
BIOB 260	Cellular and Molecular Biology	4
BIOB 272	Genetics and Evolution	4
Total Hours		17

Course List

Minimum Required Grade: C-

Upper-Division Microbiology Core Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
BIOE 370	General Ecology	3
BIOM 360	General Microbiology (equiv to 260)	3
BIOM 361	General Microbiology Lab (equiv to 261)	2
BIOM 410	Microbial Genetics	3
BIOM 411	Exprmntl Microbial Genetcs Lab	1
BIOM 415	Microbial Dvrsty Eclgy & Evltn	3
BIOM 450	Microbial Physiology	3
BIOM 451	Microbial Physiology Lab	1
Total Hours		19

Course List

Minimum Required Grade: C-

Additional Upper-Division Courses Required for Microbial Ecology Concentration

Biochemistry

CODE	TITLE	HOURS
Complete either one semester or one year of Biochemistry:		4-6
One Semester:		
BCH 380	Biochemistry	
One Year:		
BCH 480	Advanced Biochemistry I	
BCH 482	Advanced Biochemistry II	
Total Hours		4-6

Course List

Minimum Required Grade: C-

Additional Upper-Division Depth Courses in Microbiology

CODE	TITLE	HOURS
Complete 7-9 credits from the following (labs must be taken if available). 7 credits if BCH 480-482 was taken; 9 credits if BCH 380) was taken.		7-9
BIOB 410 & BIOB 411	Immunology and Immunology Laboratory	
BIOE 371	Gen Ecology Lab (equiv to 271)	
BIOE 400	Aquatic Microbial Ecology	
BIOE 428	Freshwater Ecology	
BIOE 439	Stream Ecology	
BIOE 453	Ecology of Small & Large Lakes	
BIOM 427 & BIOM 428	General Parasitology and General Parasitology Lab	
BIOM 435	Virology	
BIOM 490	Adv Undergrad Research	
BIOO 433 & BIOO 434	Plant Physiology and Plant Physiology Lab	
Total Hours		7-9

Course List

Minimum Required Grade: C-

Required Courses Outside of the Major

Mathematics - Calculus

CODE	TITLE	HOURS
Complete one of the following courses:		4
M 162	Applied Calculus	
M 171	Calculus I	
Total Hours		4

Course List

Minimum Required Grade: C-

Mathematics - Statistics

CODE	TITLE	HOURS
Complete the following course:		
STAT 216	Introduction to Statistics	4
Total Hours		4

Course List

Minimum Required Grade: C-

Chemistry

CODE	TITLE	HOURS
Complete one of the following Chemistry sequences:		10-20
Introductory:		
CHMY 121N	Introduction to General Chemistry	
CHMY 123 & CHMY 124	Introduction to Organic and Biochemistry and Introduction to Organic and Biochemistry Lab	
Advanced:		
CHMY 141N & CHMY 142N	College Chemistry I and College Chemistry I Lab	
CHMY 143N & CHMY 144N	College Chemistry II and College Chemistry II Lab	
CHMY 221 & CHMY 222	Organic Chemistry I and Organic Chemistry I Lab	
CHMY 223 & CHMY 224	Organic Chemistry II and Organic Chemistry II Lab	
Total Hours		10-20

Course List

Minimum Required Grade: C-

Physics

CODE	TITLE	HOURS
Complete one of the following Physics sequences:		5
Algebra- and Trigonometry-based Physics:		
PHSX 205N & PHSX 206N	College Physics I and College Physics I Laboratory	
Calculus-based Physics:		
PHSX 215N & PHSX 216N	Fund of Physics w/Calc I and Physics Laboratory I w/Calc	
Total Hours		5

Course List

Minimum Required Grade: C-

Additional Science Requirement

CODE	TITLE	HOURS
Complete 6 credits from the following courses:		6
CHMY 311	Analytical Chem-Quant Analysis	
CSCI 100	Intro to Programming	
CSCI 135	Fund of Computer Science I	
NRSM 210N	Soils, Water and Climate	
GEO 420	Hydrogeology	
GEO 482	Global Change	
M 172	Calculus II	
M 273	Multivariable Calculus	
PHSX 207N	College Physics II	
PHSX 208N	College Physics II Laboratory	
STAT 451	Statistical Methods I	
STAT 452	Statistical Methods II	
STAT 457	Computer Data Analysis I	
STAT 458	Computer Data Analysis II	
Total Hours		6

Course List

Minimum Required Grade: C-

Advanced College Writing Requirement

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 or one complete writing course). To meet the Advanced College Writing Requirement, Microbiology students take at least 2 partial writing courses. The Microbiology degree requires one 2/3 writing course (BIOM 411). The Advanced College Writing Requirement is completed with one more course, chosen from any of the following.

1/3 Advanced Writing Courses

CODE	TITLE	HOURS
BCH 482	Advanced Biochemistry II	3
BIOB 410	Immunology	3
BIOB 425	Adv Cell & Molecular Biology	3
BIOB 483	Phylogenics and Evolution	3
BIOE 403	Comparative Vert Anatomy	4
BIOE 409	Behavior & Evolution Discussion	1
BIOE 428	Freshwater Ecology	5
BIOL 484	Plant Evolution	3
BIOM 402	Medical Bacteriology& Mycology	3
BIOO 320	General Botany	5
BIOO 434	Plant Physiology Lab	1
BIOO 470	Ornithology	4
BIOO 475	Mammalogy	4

Course List

Minimum Required Grade: C-

2/3 Advanced Writing Courses

CODE	TITLE	HOURS
BCH 486	Biochemistry Research Lab	3
BCH 499	Senior Thesis/Capstone	3-6
BIOB 411	Immunology Laboratory	2
BIOB 499	Undergraduate Thesis	3-6
BIOE 342	Field Ecology	5
BIOE 371	Gen Ecology Lab (equiv to 271)	2
BIOM 411	Exprmntl Microbial Genetcs Lab	1
BIOM 499	Undergraduate Thesis	3-6

Course List

Minimum Required Grade: C-

Complete Advanced Writing Course

CODE	TITLE	HOURS
BIOH 462	Principles Medical Physiology	3

Course List

Minimum Required Grade: C-

Microbiology Minor < University of Montana

Microbiology Minor

Minor - Microbiology

College of Humanities & Sciences

Degree Specific Credits: 19

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Summary

CODE	TITLE	HOURS
Microbiology Core Courses		16
Additional Upper-Division Microbiology Requirement		3
Total Hours		19

Course List

Microbiology Core Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
BIOM 360	General Microbiology	3
BIOM 361	General Microbiology Lab	2
BIOM 410	Microbial Genetics	3
BIOM 411	Exprmntl Microbial Genetcs Lab	1
BIOM 415	Microbial Dvrsty Eclgy & Evltn	3
BIOM 450	Microbial Physiology	3
BIOM 451	Microbial Physiology Lab	1
Total Hours		16

Course List

Minimum Required Grade: C-

Additional Upper-Division Microbiology Requirement

CODE	TITLE	HOURS
Complete 3 additional upper division credits in BIOM.		3
Total Hours		3

Course List

Minimum Required Grade: C-

Central and Southwest Asian Studies < University of Montana

Central and Southwest Asian Studies

- Overview
- Programs

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.

Undergraduate

- Central and Southwest Asian Studies B.A.

Undergraduate Minors

- Central and Southwest Asian Studies

Central and Southwest Asian Studies B.A. < University of Montana

Central and Southwest Asian Studies B.A.

Bachelor of Arts - Central & Southwest Asian Studies

College of Humanities & Sciences

Degree Specific Credits: 37-41

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: Students are required to complete 9 credits of lower-division core courses and 9 credits of upper-division core courses in addition to completing the capstone requirement. Students also must complete the second year sequence (16-20 credits) of either Arabic OR Chinese OR Russian, for a combined total of 37-41 credits. Students are strongly recommended to take a third or fourth year of language study.

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

CODE	TITLE	HOURS
Lower-Division Core Courses		9
Upper-Division Core Courses		9
Language Electives		16-20
Capstone Requirement		3
Total Hours		37-41

Course List

Lower-Division Core Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
ANTY 141H	The Silk Road	3
ANTY 241H	Central Asian Culture and Civ	3
HSTR 262H	Islamic Civil: Classical Age	3
Total Hours		9

Course List

Minimum Required Grade: C-

Upper-Division Core Courses

CODE	TITLE	HOURS
Complete three of the following courses:		9
ANTY 347	Central Asia and Its Neighbors	
ANTY 444	Artistic Tradtns Central Asia	
HSTR 368	Iran Between Two Revolutions	
HSTR 386	Nationalism Modern Middle East	
HSTR 442	Cities/Landscps Central Asia	
Total Hours		9

Course List

Minimum Required Grade: C-

Language Electives

Rule: Complete 1 of the following subcategories; 16-20 total credits required.

Arabic

CODE	TITLE	HOURS
ARAB 101	Elementary Modern Standard Arabic I	4
ARAB 102	Elementary Modern Standard Arabic II	4
ARAB 201	Intermediate Modern Standard Arabic I	4
ARAB 202	Intermediate Modern Standard Arabic II	4
Total Hours		16

Course List

Minimum Required Grade: C-

Chinese

CODE	TITLE	HOURS
CHIN 101	Elementary Chinese I	5
CHIN 102	Elementary Chinese II	5
CHIN 201	Intermediate Chinese I	5
CHIN 202	Intermediate Chinese II	5
Total Hours		20

Course List

Minimum Required Grade: C-

Russian

CODE	TITLE	HOURS
RUSS 101	Elementary Russian I	4
RUSS 102	Elementary Russian II	4
RUSS 201	Intermediate Russian I	4
RUSS 202	Intermediate Russian II	4
Total Hours		16

Course List

Minimum Required Grade: C-

Capstone Requirement

CODE	TITLE	HOURS
Complete the following course:		
ANTY 494	Seminar/Workshop	3
Total Hours		3

Course List

Minimum Required Grade: C-

Central and Southwest Asian Studies Minor

The Central and Southwest Asian Studies Minor is available to all students and consists of eighteen credits. Students selecting the minor are required to successfully complete ANTY 141H 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 modern and classical 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 Studies

College of Humanities & Sciences

Degree Specific Credits: 18

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

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.

Summary

Course List		
CODE	**TITLE**	**HOURS**
Lower-Division Core Courses		9
Introductory Course		
Foundational Courses		
Upper-Division Core Courses		9
Total Hours		18

Lower-Division Core Courses

Introductory Course

Course List		
CODE	**TITLE**	**HOURS**
Complete the following course:		
ANTY 141H	The Silk Road	3
Total Hours		3

Minimum Required Grade: C-

Foundational Courses

		Course List
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
ANTY 241H	Central Asian Cult & Civ	3
HSTR 262H	Islamic Civil: Classical Age	3
Total Hours		6

Minimum Required Grade: C-

Upper-Division Core Courses

Course List		
CODE	**TITLE**	**HOURS**
Complete three of the following courses:		9
ANTY 347	Central Asia and Its Neighbors	
ANTY 442	Cities/Landscapes Central Asia	
ANTY 444	Artistic Tradtns Central Asia	
ANTY 492	Independent Study	
HSTR 368	Iran Between Two Revolutions	
HSTR 386	Nationalism Modern Middle East	
HSTR 492	Independent Study (Must be taken for 3 credits)	
HSTR 494	Seminar (Central Asia)	
Total Hours		9

Minimum Required Grade: C

Chemistry and Biochemistry Department

Kent Sugden, 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 programs in the Department of Chemistry and Biochemistry should visit the websites of the Department of Chemistry and Biochemistry and the Biochemistry Program.

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 modern or classical language, and four years of English.

Undergraduate

- Chemistry B.A.
- Chemistry B.S.
- Chemistry B.S., Pharmacology Concentration
- Chemistry B.S., Forensic Chemistry Concentration
- Chemistry B.S., Environmental Chemistry Concentration

Undergraduate Minors

- Chemistry Minor

Biochemistry

- Overview
- Programs

Stephen Lodmell, 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, a B.S. in Computational Biochemistry, and M.S. and Ph.D. degrees in Biochemistry & Biophysics. The Biochemistry Program is accredited by the American Society for Biochemistry and Molecular Biology (ASBMB).

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, an essential tool 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, particularly medical school. This option is designed so that students can complete all coursework necessary for the MCAT and other exams required for health-related professional schools by the end of their third year. The program also offers a B.S. in Computational Biochemistry. This degree incorporates both foundational and advanced level courses in chemistry, biology, computer science and biochemistry to prepare students who plan to pursue careers in computationally intensive fields including bioinformatics, molecular modeling, and structure-based design. Students desiring a basic grounding in biochemistry to complement their primary major can choose to pursue a minor in Biochemistry. All students completing a major or minor in Biochemistry are eligible to take the ASBMB certification exam in their junior or senior year.

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.

Undergraduate

- Biochemistry B.S.
- Biochemistry B.S., Health Professions Concentration
- Computational Biochemistry B.S.

Undergraduate Minors

- Biochemistry

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, a B.S. in Computational Biochemistry, and M.S. and Ph.D. degrees in Biochemistry & Biophysics. The Biochemistry Program is accredited by the American Society for Biochemistry and Molecular Biology (ASBMB).

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, an essential tool 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.

Bachelor of Science - Biochemistry

College of Humanities & Sciences

Degree Specific Credits: 93

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

Course List		
CODE	**TITLE**	**HOURS**
Lower-Division Core -54 credits		
Biochemistry		1
Biology		12
General and Organic Chemistry		20
Physics		10
Mathematics		8
Computer Science		3
Upper-Division Core - 27 credits		
Biochemistry		9
Biology		3
Analytical Chemistry		8
Inorganic Chemistry		3
Physical Chemistry		4
Advanced Electives		12
Total Hours		93

Lower-Division Core

Rule: Must complete the following subcategories. 54 total credits required.

Biochemistry

Course List		
CODE	**TITLE**	**HOURS**
Complete the following course:		
BCH 294	Seminar/Workshop	1
Total Hours		1

Minimum Required Grade: C-

Biology

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
BIOB 160N	Principles of Living Systems	3
BIOB 161N	Prncpls of Living Systems Lab	1
BIOB 260	Cellular and Molecular Biology	4
BIOB 272	Genetics and Evolution	4
Total Hours		12

Minimum Required Grade: C-

General and Organic Chemistry

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
CHMY 141N & CHMY 142N	College Chemistry I and College Chemistry I Lab	5
CHMY 143N & CHMY 144N	College Chemistry II and College Chemistry II Lab	5
CHMY 221 & CHMY 222	Organic Chemistry I and Organic Chemistry I Lab	5
CHMY 223 & CHMY 224	Organic Chemistry II and Organic Chemistry II Lab	5
Total Hours		20

Minimum Required Grade: C-

Physics

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
PHSX 215N & PHSX 216N	Fund of Physics w/Calc I and Physics Laboratory I w/Calc	5
PHSX 217N & PHSX 218N	Fund of Physics w/Calc II and Physics Laboratory II w/Calc	5
Total Hours		10

Minimum Required Grade: C-

Mathematics

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
M 171	Calculus I	4
M 172	Calculus II	4
Total Hours		8

Minimum Required Grade: C-

Computer Science

Course List		
CODE	**TITLE**	**HOURS**
Complete the following course:		
CSCI 100	Intro to Programming	3
Total Hours		3

Minimum Required Grade: C-

Upper Division Core

Rule: Must complete the following subcategories. 27 total credits required.

Biochemistry

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
BCH 480	Advanced Biochemistry I	3
BCH 482	Advanced Biochemistry II	3
BCH 486	Biochemistry Research Lab	3
Total Hours		9

Minimum Required Grade: C-

Biology

Course List		
CODE	**TITLE**	**HOURS**
Complete the following course:		
BIOB 425	Adv Cell & Molecular Biology	3
Total Hours		3

Minimum Required Grade: C-

Analytical Chemistry

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
CHMY 311	Analytical Chem-Quant Analysis	4
CHMY 421	Advanced Instrument Analysis	4
Total Hours		8

Minimum Required Grade: C-

Inorganic Chemistry

Course List		
CODE	**TITLE**	**HOURS**
Complete the following course:		
CHMY 401	Advanced Inorganic Chemistry	3
Total Hours		3

Minimum Required Grade: C-

Physical Chemistry

Note: Students planning to attend graduate school in biochemistry or biophysics are strongly advised to take the CHMY 373-CHMY 371 sequence

Course List		
CODE	**TITLE**	**HOURS**
Complete the following course:		4
CHMY 373	Phys Chem-Kntcs & Thrmdynmcs	
Total Hours		4

Minimum Required Grade: C-

Advanced Electives

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 List

CODE	TITLE	HOURS
Complete 12 credits from the following courses:		12
BCH 490	Undergraduate Research	
BIOB 301	Developmental Biology	
BIOB 375	General Genetics	
BIOB 410	Immunology	
BIOB 411	Immunology Laboratory	
BIOB 486	Genomics	
BIOB 490	Adv Undergrad Research	
BIOH 365	Human Anatomy and Physiology for Health Professions I	
BIOH 370	Human Anatomy and Physiology for Health Professions II	
BIOH 405	Hematology	
BIOH 462	Principles Medical Physiology	
BIOM 360	General Microbiology	
BIOM 361	General Microbiology Lab	
BIOM 410	Microbial Genetics	
BIOM 411	Exprmntl Microbial Genetcs Lab	
BIOM 427	General Parasitology	
BIOM 428	General Parasitology Lab	
BIOM 435	Virology	
CHMY 371	Phys Chem-Qntm Chm & Spctrscpy	
CHMY 397	Teaching Chemistry	
CHMY 402	Advanced Inorganic Chem Lab	
CHMY 442	Aquatic Chemistry	
CHMY 465	Organic Spectroscopy	
CHMY 466	FT-NMR Optn for Undrgrd Rsrch	
CHMY 485	Laboratory Safety	
CHMY 490	Undergraduate Research	
CHMY 494	Seminar/Workshop	
CHMY 498	Internship/Cooperative Educ	
CSCI 451	Computational Biology	
PHAR 421	Medicinal Chem I	
PHAR 422	Medicinal Chem II	

Total Hours	12

Minimum Required Grade: C-

Advanced College Writing Requirement

Rule: To complete the Advanced College Writing Requirement, Biochemistry students may take the following courses or any other stand-alone advanced writing course.

		Course List
CODE	**TITLE**	**HOURS**
BCH 482	Advanced Biochemistry II	3
BCH 486	Biochemistry Research Lab	3

Minimum Required Grade: C-

Biochemistry B.S. - Health Professions

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, a B.S. in Computational Biochemistry, and M.S. and Ph.D. degrees in Biochemistry & Biophysics. The Biochemistry Program is accredited by the American Society for Biochemistry and Molecular Biology (ASBMB).

A Health Professions option is offered within the B.S. in Biochemistry for students whose career goals are in fields related to biochemistry, particularly medical school. This option is designed so that students can complete all coursework necessary for the MCAT and other exams required for health-related professional schools by the end of their third year.

Bachelor of Science - Biochemistry; Health Professions Concentration

College of Humanities & Sciences

Degree Specific Credits: 96

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

Course List		
CODE	**TITLE**	**HOURS**
Lower-Division Core		51
Biochemistry		
Biology		
General and Organic Chemistry		
Physics		
Mathematics		
Upper-Division Core		32
Biochemistry		
Microbiology		
Biology - Human		
Allied Health - Human Science		
Analytical Chemistry		
Advanced Electives		7
Social Science - Sociology and Psychology		6
Total Hours		96

Lower-Division Core

Rule: Complete the following subcategories. 51 total credits required.

Biochemistry

Course List		
CODE	**TITLE**	**HOURS**
Complete the following course:		
BCH 294	Seminar/Workshop	1
Total Hours		1

Minimum Required Grade: C-

Biology

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
BIOB 160N	Principles of Living Systems	3
BIOB 161N	Prncpls of Living Systems Lab	1
BIOB 260	Cellular and Molecular Biology	4
BIOB 272	Genetics and Evolution	4
Total Hours		12

Minimum Required Grade: C-

General and Organic Chemistry

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
CHMY 141N & CHMY 142N	College Chemistry I and College Chemistry I Lab	5
CHMY 143N & CHMY 144N	College Chemistry II and College Chemistry II Lab	5
CHMY 221 & CHMY 222	Organic Chemistry I and Organic Chemistry I Lab	5
CHMY 223 & CHMY 224	Organic Chemistry II and Organic Chemistry II Lab	5
Total Hours		20

Minimum Required Grade: C-

Physics

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
PHSX 215N & PHSX 216N	Fund of Physics w/Calc I and Physics Laboratory I w/Calc	5
PHSX 217N & PHSX 218N	Fund of Physics w/Calc II and Physics Laboratory II w/Calc	5
Total Hours		10

Minimum Required Grade: C-

Mathematics

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
M 171	Calculus I	4
M 172	Calculus II	4
Total Hours		8

Minimum Required Grade: C-

Upper-Division Core

Rule: Complete the following subcategories. 32 total credits required.

Biochemistry

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
BCH 480	Advanced Biochemistry I	3
BCH 482	Advanced Biochemistry II	3
BCH 486	Biochemistry Research Lab	3
Total Hours		9

Minimum Required Grade: C-

Microbiology

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
BIOM 360	General Microbiology (equiv to 260)	3
BIOM 361	General Microbiology Lab	2
Total Hours		5

Minimum Required Grade: C-

Biology - Human

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
BIOH 365 & BIOH 366	Human Anatomy and Physiology for Health Professions I and Human Anatomy and Physiology for Health Professions I Laboratory	4
BIOH 370 & BIOH 371	Human Anatomy and Physiology for Health Professions II and Human Anatomy and Physiology for Health Professions II Laboratory	4
Total Hours		8

Minimum Required Grade: C-

Allied Health - Health Science

Course List		
CODE	**TITLE**	**HOURS**
Complete the following course:		
AHHS 391	Special topics (Pre-Medical Science 101 Honors)	2
Total Hours		2

Minimum Required Grade: C-

Analytical Chemistry

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
CHMY 311	Analytical Chem-Quant Analysis	4
CHMY 421	Advanced Instrument Analysis	4
Total Hours		8

Minimum Required Grade: C-

Advanced Electives

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 List		
CODE	**TITLE**	**HOURS**
Complete 7 credits from the following courses:		7
BCH 490	Undergraduate Research	
BIOB 301	Developmental Biology	
BIOB 375	General Genetics	
BIOB 410	Immunology	
BIOB 411	Immunology Laboratory	
BIOB 425	Adv Cell & Molecular Biology	
BIOB 486	Genomics	
BIOB 490	Adv Undergrad Research	
BIOH 405	Hematology	
BIOH 462	Principles Medical Physiology	
BIOM 410	Microbial Genetics	
BIOM 411	Exprmntl Microbial Genetcs Lab	
BIOM 427	General Parasitology	
BIOM 428	General Parasitology Lab	
BIOM 435	Virology	
CHMY 371	Phys Chem-Qntm Chm & Spctrscpy	
CHMY 373	Phys Chem-Kntcs & Thrmdynmcs	
CHMY 397	Teaching Chemistry	
CHMY 401	Advanced Inorganic Chemistry	
CHMY 402	Advanced Inorganic Chem Lab	
CHMY 442	Aquatic Chemistry	
CHMY 465	Organic Spectroscopy	
CHMY 466	FT-NMR Optn for Undrgrd Rsrch	
CHMY 490	Undergraduate Research	
CHMY 494	Seminar/Workshop	
CHMY 498	Internship/Cooperative Educ	
PHAR 421	Medicinal Chem I	
PHAR 422	Medicinal Chem II	
STAT 451	Statistical Methods I	
Total Hours		7

Minimum Required Grade: C-

Social Science - Sociology and Psychology

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
SOCI 101S	Introduction to Sociology	3
PSYX 100S	Intro to Psychology	3
Total Hours		6

Minimum Required Grade: C-

Advanced College Writing Requirement

Rule: To complete the Advanced College Writing Requirement, Biochemistry students may take the following courses or any other stand-alone advanced writing course.

		Course List
CODE	**TITLE**	**HOURS**
BCH 482	Advanced Biochemistry II	3
BCH 486	Biochemistry Research Lab	3

Minimum Required Grade: C-

Computational 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, a B.S. in Computational Biochemistry and M.S. and Ph.D. degrees in Biochemistry & Biophysics. The Biochemistry Program is accredited by the American Society for Biochemistry and Molecular Biology (ASBMB).

The program also offers a B.S. in Computational Biochemistry. This degree incorporates both foundational and advanced level courses in chemistry, biology, computer science and biochemistry to prepare students who plan to pursue careers in computationally intensive fields including bioinformatics, molecular-modeling and structure-based design.

Bachelor of Science - Computational Biochemistry

College of Humanities & Sciences

Degree Specific Credits: 96

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

Course List		
CODE	**TITLE**	**HOURS**
Lower Division Core		
Biochemistry		1
Biology		8
Computer Science		10
General Organic Chemistry		20
Physics		10
Math		8
Upper Division Core		
Biochemistry		9
Biology		3
Analytical Chemistry		8
Physical Chemistry		4
Computer Science		6
Advanced Electives		9
Total Hours		96

Lower-Division Core

Rule: Must complete the following subcategories. 57 total credits required.

Biochemistry

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
BCH 294	Seminar/Workshop	1
Total Hours		1

Minimum Required Grade: C-

Biology

Course List		
CODE	**TITLE**	**HOURS**
Complete the following course:		
BIOB 160N	Principles of Living Systems	3
BIOB 161N	Prncpls of Living Systems Lab	1
BIOB 272	Genetics and Evolution	4
Total Hours		8

Minimum Required Grade: C-

Computer Science

Course List		
CODE	**TITLE**	**HOURS**
Complete the following:		
CSCI 135	Fund of Computer Science I	3
CSCI 136	Fund of Computer Science II	3
CSCI 232	Data Structures and Algorithms	4
Total Hours		10

Minimum Required Grade: C-

General and Organic Chemistry

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
CHMY 141N & CHMY 142N	College Chemistry I and College Chemistry I Lab	5
CHMY 143N & CHMY 144N	College Chemistry II and College Chemistry II Lab	5
CHMY 221 & CHMY 222	Organic Chemistry I and Organic Chemistry I Lab	5
CHMY 223 & CHMY 224	Organic Chemistry II and Organic Chemistry II Lab	5
Total Hours		20

Minimum Required Grade: C-

Physics

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
PHSX 215N & PHSX 216N	Fund of Physics w/Calc I and Physics Laboratory I w/Calc	5
PHSX 217N & PHSX 218N	Fund of Physics w/Calc II and Physics Laboratory II w/Calc	5
Total Hours		10

Minimum Required Grade: C-

Mathematics

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
M 171	Calculus I	4
M 172	Calculus II	4
Total Hours		8

Minimum Required Grade: C-

Upper-Division Core

Rule: Must complete the following subcategories. 30 total credits required.

Biochemistry

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
BCH 480	Advanced Biochemistry I	3
BCH 482	Advanced Biochemistry II	3
BCH 486	Biochemistry Research Lab	3
Total Hours		9

Minimum Required Grade: C-

Biology

Course List		
CODE	**TITLE**	**HOURS**
Complete the following course:		
BIOB 486	Genomics	3
Total Hours		3

Minimum Required Grade: C-

Analytical Chemistry

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
CHMY 311	Analytical Chem-Quant Analysis	4
CHMY 421	Advanced Instrument Analysis	4
Total Hours		8

Minimum Required Grade: C-

Physical Chemistry

Course List		
CODE	**TITLE**	**HOURS**
Complete the following course:		
CHMY 373	Phys Chem-Kntcs & Thrmdynmcs	4
Total Hours		4

Minimum Required Grade: C-

Computer Science

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
CSCI 315E	Computers, Ethics, and Society	3
CSCI 451	Computational Biology	3
Total Hours		6

Minimum Required Grade: C-

Advanced Electives

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 List
CODE	**TITLE**	**HOURS**
Complete 3 credits from the following courses:		3
CSCI 332	Design/Analysis of Algorithms	
CSCI 340	Database Design	
CSCI 444	Data Visualization	
CSCI 447	Machine Learning	
Complete 6 credits from the following courses:		6
BCH 490	Undergraduate Research	
BIOB 301	Developmental Biology	
BIOB 375	General Genetics	
BIOB 410	Immunology	
BIOB 411	Immunology Laboratory	
BIOB 425	Adv Cell & Molecular Biology	
BIOB 490	Adv Undergrad Research	
BIOH 365	Human Anatomy and Physiology for Health Professions I	
BIOH 370	Human Anatomy and Physiology for Health Professions II	
BIOH 405	Hematology	
BIOH 462	Principles Medical Physiology	
BIOM 360	General Microbiology	
BIOM 361	General Microbiology Lab	
BIOM 410	Microbial Genetics	
BIOM 411	Exprmntl Microbial Genetcs Lab	

BIOM 427	General Parasitology	
BIOM 428	General Parasitology Lab	
BIOM 435	Virology	
CHMY 371	Phys Chem-Qntm Chm & Spctrscpy	
CHMY 397	Teaching Chemistry	
CHMY 401	Advanced Inorganic Chemistry	
CHMY 402	Advanced Inorganic Chem Lab	
CHMY 442	Aquatic Chemistry	
CHMY 465	Organic Spectroscopy	
CHMY 466	FT-NMR Optn for Undrgrd Rsrch	
CHMY 490	Undergraduate Research	
CHMY 494	Seminar/Workshop	
CHMY 498	Internship/Cooperative Educ	
PHAR 421	Medicinal Chem I	
PHAR 422	Medicinal Chem II	
Total Hours		9

Minimum Required Grade: C-

Advanced College Writing Requirement

Rule: To complete the Advanced College Writing Requirement, Biochemistry students may take the following courses or any other stand-alone advanced writing course.

		Course List
CODE	**TITLE**	**HOURS**
BCH 482	Advanced Biochemistry II	3
BCH 486	Biochemistry Research Lab	3

Minimum Required Grade: C-

Biochemistry Minor < University of Montana

Biochemistry Minor

- Overview
- Requirements

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, a B.S. in Computational Biochemistry, and M.S. and Ph.D. degrees in Biochemistry & Biophysics. The Biochemistry Program is accredited by the American Society for Biochemistry and Molecular Biology (ASBMB).

Students desiring a basic grounding in biochemistry to complement their primary major can choose to pursue a minor in Biochemistry. All students completing a major or minor in Biochemistry are eligible to take the ASBMB certification exam in their junior or senior year.

Minor - Biochemistry

College of Humanities & Sciences

Degree Specific Credits: 29

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Summary

CODE	
Biology	
Chemistry	
Upper-Division Biochemistry	
Total Hours	

Course List

Biology

CODE	
Complete all of the following courses	
BIOB 160N	P
BIOB 161N	P
Total Hours	

Course List

Minimum Required Grade: C-

Chemistry

CODE	TITLE	HOU
Complete all of the following courses:		
CHMY 141N	College Chemistry I	4
CHMY 142N	College Chemistry I Lab	1
CHMY 143N	College Chemistry II	4
CHMY 144N	College Chemistry II Lab	1
CHMY 221	Organic Chemistry I	3
CHMY 223	Organic Chemistry II	3
Total Hours		16

Course List

Upper-Division Biochemistry

Upper Division Biochemistry

CODE	TITLE
Complete all of the following courses:	
BCH 480	Advanced Biochemistry I
BCH 482	Advanced Biochemistry II
BCH 486	Biochemistry Research Lab
Total Hours	

Course List

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 Education Program. It is strongly advised that students using this degree obtain faculty advice in planning their program.

Bachelor of Arts - Chemistry

College of Humanities & Sciences

Degree Specific Credits: 76

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

Course List		
CODE	**TITLE**	**HOURS**
Lower-Division Core Courses		45
General Chemistry		
Organic Chemistry		
Physics		
Mathematics		
Computer Science		
Upper-Division Core Courses		16
Analytical Chemistry		
Physical Chemistry		
Advanced Electives		15
Teaching Chemistry Track		
Total Hours		76

Lower-Division Core Courses

General Chemistry

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
CHMY 141N & CHMY 142N	College Chemistry I and College Chemistry I Lab	5
CHMY 143N & CHMY 144N	College Chemistry II and College Chemistry II Lab	5
Total Hours		10

Minimum Required Grade: C-

Organic Chemistry

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
CHMY 221 & CHMY 222	Organic Chemistry I and Organic Chemistry I Lab	5
CHMY 223 & CHMY 224	Organic Chemistry II and Organic Chemistry II Lab	5
Total Hours		10

Minimum Required Grade: C-

Physics

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
PHSX 215N & PHSX 216N	Fund of Physics w/Calc I and Physics Laboratory I w/Calc	5
PHSX 217N & PHSX 218N	Fund of Physics w/Calc II and Physics Laboratory II w/Calc	5
Total Hours		10

Minimum Required Grade: C-

Mathematics

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
M 171	Calculus I	4
M 172	Calculus II	4
M 273	Multivariable Calculus	4
Total Hours		12

Minimum Required Grade: C-

Computer Science

Course List		
CODE	**TITLE**	**HOURS**
Complete the following course:		
CSCI 125	Computation in the Sciences	3

Minimum Required Grade: C-

Upper-Division Core Courses

Analytical Chemistry

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
CHMY 311	Analytical Chem-Quant Analysis	4
CHMY 421	Advanced Instrument Analysis	4
Total Hours		8

Minimum Required Grade: C-

Physical Chemistry

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
CHMY 371	Phys Chem-Qntm Chm & Spctrscpy	4
CHMY 373	Phys Chem-Kntcs & Thrmdynmcs	4
Total Hours		8

Minimum Required Grade: C-

Advanced College Writing Requirement

Rule: To complete the Advanced College Writing Requirement, Chemistry students may take the following courses or any other stand-alone advanced writing course.

		Course List
CODE	**TITLE**	**HOURS**
BCH 482	Advanced Biochemistry II	3
BCH 486	Biochemistry Research Lab	3

Minimum Required Grade: C-

Advanced Electives

Rule: Complete 9 credits of advanced electives in Chemistry or Biochemistry approved by the Chemistry adviser and 6 credits of advanced electives at the discretion of the student. 15 total credits required.

Minimum Required Grade: C-

Teaching Chemistry Track

Notes:

- This teaching track contains different/additional course requirements designed to meet state standards. Those interested in teaching in K-12 schools must complete the teaching track of a major in a teaching content area plus the Teacher Education Program through the Department of Teaching and Learning. Additional teaching areas can be added through completion of the teaching track of a major or minor in that content area.
  - Secondary Education Licensure Program
  - Licensure Degree Requirements
- To complete this teaching track, you need to contact the Teaching and Learning Department. You do not fill out a major/minor form for graduation or the major/minor/concentration section of the major change form. Approvals for this track must come from the Teaching and Learning Department.
- Tracks will not appear on your UM transcript, diploma, university lists, student data system, or university publications. They are used for advising purposes only. You do not fill out a major change for a track.

Teaching Chemistry Required Courses

Note: The EDU 497 course number is used for multiple courses. Students should register for EDU 497 Methods: 5-12 Science.

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
EDU 497	Teaching and Assessing	4
ENST 472	Gen Sci: Conservation Education	3
Total Hours		7

Minimum Required Grade: C-

Secondary Teaching Licensure

Note: For endorsement to teach chemistry, a student also must gain admission to the Teacher Education Program and meet all the requirements for secondary teaching licensure. For more information, see the Teaching and Learning Department.

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 of Humanities & Sciences

Degree Specific Credits: 92

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

Course List		
CODE	**TITLE**	**HOURS**
Lower-Division Core Courses		49
Biology		
General Chemistry		
Organic Chemistry		
Physics		
Mathematics		
Computer Science		
Upper-Division Core Courses		33
Analytical Chemistry		
Physical Chemistry		
Inorganic Chemistry		
Biochemistry		
Mathematics		
Advanced Electives		3
Modern & Classical Language OR Additional Advanced Electives		7
Total Hours		92

Lower-Division Core Courses

Biology

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
BIOB 160N	Principles of Living Systems	3
BIOB 161N	Prncpls of Living Systems Lab	1
Total Hours		4

Minimum Required Grade: C-

General Chemistry

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
CHMY 141N & CHMY 142N	College Chemistry I and College Chemistry I Lab	5
CHMY 143N & CHMY 144N	College Chemistry II and College Chemistry II Lab	5
Total Hours		10

Minimum Required Grade: C-

Organic Chemistry

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
CHMY 221 & CHMY 222	Organic Chemistry I and Organic Chemistry I Lab	5
CHMY 223 & CHMY 224	Organic Chemistry II and Organic Chemistry II Lab	5
Total Hours		10

Minimum Required Grade: C-

Physics

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
PHSX 215N & PHSX 216N	Fund of Physics w/Calc I and Physics Laboratory I w/Calc	5
PHSX 217N & PHSX 218N	Fund of Physics w/Calc II and Physics Laboratory II w/Calc	5
Total Hours		10

Minimum Required Grade: C-

Mathematics

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
M 171	Calculus I	4
M 172	Calculus II	4
M 273	Multivariable Calculus	4
Total Hours		12

Minimum Required Grade: C-

Computer Science

Course List		
CODE	**TITLE**	**HOURS**
Complete the following course:		
CSCI 125	Computation in the Sciences	3

Minimum Required Grade: C-

Upper-Division Core Courses

Analytical Chemistry

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
CHMY 311	Analytical Chem-Quant Analysis	4
CHMY 421	Advanced Instrument Analysis	4
Total Hours		8

Minimum Required Grade: C-

Physical Chemistry

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
CHMY 371	Phys Chem-Qntm Chm & Spctrscpy	4
CHMY 373	Phys Chem-Kntcs & Thrmdynmcs	4
Total Hours		8

Minimum Required Grade: C-

Inorganic Chemistry

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
CHMY 401	Advanced Inorganic Chemistry	3
CHMY 402	Advanced Inorganic Chem Lab	2
Total Hours		5

Minimum Required Grade: C-

Biochemistry

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
BCH 480	Advanced Biochemistry I	3
BCH 482	Advanced Biochemistry II	3
BCH 486	Biochemistry Research Lab	3
Total Hours		9

Minimum Required Grade: C-

Mathematics

Course List		
CODE	**TITLE**	**HOURS**
Complete the following course:		
M 311	Ordinary Differential Equations and Systems	3
Total Hours		3

Minimum Required Grade: C-

Advanced Electives

Note: Other classes in Chemistry, Physics, Geology, Biochemistry, or Mathematics may be used to meet the advanced electives requirement with approval of the chemistry advisor. A maximum of 3 credits of CHMY 492 or CHMY 499 may be applied toward degree requirements.

Course List		
CODE	**TITLE**	**HOURS**
Complete 3 credits in the following courses:		3
CHMY 391	Special Topics/Expmntl Crse	
CHMY 442	Aquatic Chemistry	
CHMY 465	Organic Spectroscopy	
CHMY 491	Special Topics/Expmntl Crse	
CHMY 492	Independent Study	
CHMY 499	Senior Thesis/capstone	
Total Hours		3

Minimum Required Grade: C-

Advanced College Writing Requirement

Rule: To complete the Advanced College Writing Requirement, Chemistry students may take the following courses or any other stand-alone advanced writing course.

		Course List
CODE	**TITLE**	**HOURS**
BCH 482	Advanced Biochemistry II	3
BCH 486	Biochemistry Research Lab	3

Minimum Required Grade: C-

Modern & Classical Language OR Additional Advanced Electives

Rule: Complete 2 semesters of a language or 2 additional advanced elective courses of at least 3 credits each from the above list. Subject to approval of the chemistry advisor.

Note: Other classes in Chemistry, Physics, Geology, Biochemistry, or Mathematics may be used to meet the advanced electives requirement with approval of the chemistry advisor. A maximum of 3 credits of CHMY 492 or CHMY 499 may be applied toward degree requirements.

Minimum Required Grade: C-

University Of Montana

Chemistry B.S. - Environmental Chemistry

Bachelor of Science - Chemistry; Environmental Chemistry Concentration

College of Humanities & Sciences

Degree Specific Credits: 92

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

Course List		
CODE	**TITLE**	**HOURS**
Lower-Division Core Courses		54
General Chemistry		
Organic Chemistry		
Physics		
Mathematics		
Geology		
Biology		
Upper-Division Core Courses		30
Analytical Chemistry		
Physical Chemistry		
Inorganic Chemistry		
Biochemistry		
Statistics		
Geology		
Advanced Electives		8
Total Hours		92

Lower-Division Core Courses

General Chemistry

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
CHMY 141N & CHMY 142N	College Chemistry I and College Chemistry I Lab	5
CHMY 143N & CHMY 144N	College Chemistry II and College Chemistry II Lab	5
Total Hours		10

Minimum Required Grade: C-

Organic Chemistry

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
CHMY 221 & CHMY 222	Organic Chemistry I and Organic Chemistry I Lab	5
CHMY 223 & CHMY 224	Organic Chemistry II and Organic Chemistry II Lab	5
Total Hours		10

Minimum Required Grade: C-

Physics

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
PHSX 215N & PHSX 216N	Fund of Physics w/Calc I and Physics Laboratory I w/Calc	5
PHSX 217N & PHSX 218N	Fund of Physics w/Calc II and Physics Laboratory II w/Calc	5
Total Hours		10

Minimum Required Grade: C-

Mathematics

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
M 171	Calculus I	4
M 172	Calculus II	4
Total Hours		8

Minimum Required Grade: C-

Geology

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
GEO 101N	Introduction to Physical Geology	3
GEO 102N	Introduction to Physical Geology Lab	1
Total Hours		4

Minimum Required Grade: C-

Biochemistry Biology

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
BIOB 160N	Principles of Living Systems	3
BIOB 161N	Prncpls of Living Systems Lab	1
BIOB 260	Cellular and Molecular Biology	4
BIOB 272	Genetics and Evolution	4
Total Hours		12

Minimum Required Grade: C-

Upper-Division Core Courses

Analytical Chemistry

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
CHMY 311	Analytical Chem-Quant Analysis	4
CHMY 421	Advanced Instrument Analysis	4
Total Hours		8

Minimum Required Grade: C-

Physical Chemistry

Course List		
CODE	**TITLE**	**HOURS**
Complete the following course:		
CHMY 373	Phys Chem-Kntcs & Thrmdynmcs	4
Total Hours		4

Minimum Required Grade: C-

Inorganic Chemistry

Course List		
CODE	**TITLE**	**HOURS**
Complete the following course:		
CHMY 401	Advanced Inorganic Chemistry	3
Total Hours		3

Minimum Required Grade: C-

Biochemistry

Course List		
CODE	**TITLE**	**HOURS**
Complete the following course:		
BCH 480	Advanced Biochemistry I	3
Total Hours		3

Minimum Required Grade: C-

Statistics

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
STAT 451	Statistical Methods I	3
STAT 457	Computer Data Analysis I	1
Total Hours		4

Minimum Required Grade: C-

Geology

Course List		
CODE	**TITLE**	**HOURS**
Complete the following course:		
GEO 320	Global Water	4
GEO 327	Geochemistry	4
Total Hours		8

Minimum Required Grade: C-

Advanced Electives

Note: A maximum of 3 credits each of CHMY 492, BIOB 492, and GEO 492 be applied to meet the advanced electives requirement. In addition, a maximum of 5 credits of a language may be applied to meet the advanced electives requirement.

Course List		
CODE	**TITLE**	**HOURS**
Complete 8 credits from the following courses:		8
BIOB 490	Adv Undergrad Research	
BIOB 492	Independent Study	
BIOE 370	General Ecology	
BIOE 439	Stream Ecology	
BIOE 453	Ecology of Small & Large Lakes	
BIOM 360	General Microbiology (equiv to BIOM 260)	
CHMY 373	Phys Chem-Kntcs & Thrmdynmcs	
CHMY 391	Special Topics/Expmntl Crse	
CHMY 402	Advanced Inorganic Chem Lab	
CHMY 403	Descriptive Inorganic Chem	
CHMY 442	Aquatic Chemistry	
CHMY 465	Organic Spectroscopy	
CHMY 466	FT-NMR Optn for Undrgrd Rsrch	
CHMY 491	Special Topics/Expmntl Crse	
CHMY 492	Independent Study	
GEO 320	Global Water	
GEO 420	Hydrogeology	
GEO 492	Independent Study	
STAT 452	Statistical Methods II	
Total Hours		8

Minimum Required Grade: C-

Advanced College Writing Requirement

Rule: To complete the Advanced College Writing Requirement, Chemistry students may take the following courses or any other stand-alone advanced writing course.

		Course List
CODE	**TITLE**	**HOURS**
BCH 482	Advanced Biochemistry II	3
BCH 486	Biochemistry Research Lab	3

Minimum Required Grade: C-

University Of Montana

Chemistry B.S. - Forensic Chemistry

Bachelor of Science - Chemistry; Forensic Chemistry Concentration

College of Humanities & Sciences

Degree Specific Credits: 97

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

Course List		
CODE	**TITLE**	**HOURS**
Lower-Division Core Courses		52
General Chemistry		
Organic Chemistry		
Biology		
Physics		
Mathematics		
Forensic Science and Criminal Justice		
Upper-Division Core Courses		32
Analytical Chemistry		
Physical Chemistry		
Inorganic Chemistry		
Biochemistry		
Experiential Learning		
Seminar		
Statistics		
Advanced Electives		7
Expressive Art - Public Speaking		3
Social Science - Criminology		3
Total Hours		97

Lower-Division Core Courses

General Chemistry

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
CHMY 141N & CHMY 142N	College Chemistry I and College Chemistry I Lab	5
CHMY 143N & CHMY 144N	College Chemistry II and College Chemistry II Lab	5
Total Hours		10

Minimum Required Grade: C-

Organic Chemistry

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
CHMY 221 & CHMY 222	Organic Chemistry I and Organic Chemistry I Lab	5
CHMY 223 & CHMY 224	Organic Chemistry II and Organic Chemistry II Lab	5
Total Hours		10

Minimum Required Grade: C-

Biochemistry and Biology

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
BIOB 160N	Principles of Living Systems	3
BIOB 161N	Prncpls of Living Systems Lab	1
BIOB 260	Cellular and Molecular Biology	4
Total Hours		8

Minimum Required Grade: C-

Physics

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
PHSX 215N & PHSX 216N	Fund of Physics w/Calc I and Physics Laboratory I w/Calc	5
PHSX 217N & PHSX 218N	Fund of Physics w/Calc II and Physics Laboratory II w/Calc	5
Total Hours		10

Minimum Required Grade: C-

Mathematics

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
M 171	Calculus I	4
M 172	Calculus II	4
Total Hours		8

Minimum Required Grade: C-

Forensic Science and Criminal Justice

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
CJUS 125N	Fund of Forensic Science	3
SOCI 221	Criminal Justice System	3
Total Hours		6

Minimum Required Grade: C-

Upper-Division Core Courses

Rule: All courses in all subcategories listed are required.

Analytical Chemistry

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
CHMY 311	Analytical Chem-Quant Analysis	4
CHMY 421	Advanced Instrument Analysis	4
Total Hours		8

Minimum Required Grade: C-

Physical Chemistry

Course List		
CODE	**TITLE**	**HOURS**
Complete the following course:		
CHMY 373	Phys Chem-Kntcs & Thrmdynmcs	4
Total Hours		4

Minimum Required Grade: C-

Inorganic Chemistry

Course List		
CODE	**TITLE**	**HOURS**
Complete the following course:		
CHMY 401	Advanced Inorganic Chemistry	3
Total Hours		3

Minimum Required Grade: C-

Biochemistry

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
BCH 480	Advanced Biochemistry I	3
BCH 482	Advanced Biochemistry II	3
BCH 486	Biochemistry Research Lab	3
Total Hours		9

Minimum Required Grade: C-

Experiential Learning

Course List		
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		
CHMY 488	Forensic Research	3
or CHMY 498	Internship/Cooperative Educ	
Total Hours		3

Minimum Required Grade: C-

Seminar

Course List		
CODE	**TITLE**	**HOURS**
Complete the following course:		
CHMY 489	Forensic Research Seminar	1
Total Hours		1

Minimum Required Grade: C-

Statistics

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
STAT 451	Statistical Methods I	3
STAT 457	Computer Data Analysis I	1
Total Hours		4

Minimum Required Grade: C-

Advanced Electives

Course List		
CODE	**TITLE**	**HOURS**
Complete 7 credits from the following courses:		7
CHMY 411	Advanced Organic Chemistry	
CHMY 465	Organic Spectroscopy	
CHMY 466	FT-NMR Optn for Undrgrd Rsrch	
CHMY 542	Separation Science	
CJUS 488	Forensic Science the Crime Lab and Beyond	
Total Hours		7

Minimum Required Grade: C-

Advanced College Writing Requirement

Rule: To complete the Advanced College Writing Requirement, Chemistry students may take the following courses or any other stand-alone advanced writing course.

		Course List
CODE	**TITLE**	**HOURS**
BCH 482	Advanced Biochemistry II	3
BCH 486	Biochemistry Research Lab	3

Minimum Required Grade: C-

Expressive Art - Public Speaking

Course List		
CODE	**TITLE**	**HOURS**
Complete the following course:		
COMX 111A	Introduction to Public Speaking	3
Total Hours		3

Minimum Required Grade: C-

Social Science - Criminology

Course List		
CODE	**TITLE**	**HOURS**
Complete the following course:		
SOCI 211S	Introduction to Criminology	3
Total Hours		3

Minimum Required Grade: C-

University Of Montana

Chemistry B.S. - Pharmacology

Bachelor of Science - Chemistry; Pharmacology Concentration

College of Humanities & Sciences

Degree Specific Credits: 93

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

Course List		
CODE	**TITLE**	**HOURS**
Lower-Division Core Courses		53
General Chemistry		
Organic Chemistry		
Biology		
Computer Science		
Physics		
Mathematics		
Upper-Division Core Courses		40
Analytical Chemistry		
Physical Chemistry		
Inorganic Chemistry		
Biochemistry		
Pharmacology		
Biology		
Total Hours		93

Lower-Division Core Courses

General Chemistry

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
CHMY 141N & CHMY 142N	College Chemistry I and College Chemistry I Lab	5
CHMY 143N & CHMY 144N	College Chemistry II and College Chemistry II Lab	5
Total Hours		10

Minimum Required Grade: C-

Organic Chemistry

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
CHMY 221	Organic Chemistry I	3
CHMY 222	Organic Chemistry I Lab	2
CHMY 223	Organic Chemistry II	3
CHMY 224	Organic Chemistry II Lab	2
Total Hours		10

Minimum Required Grade: C-

Biology

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
BIOB 160N	Principles of Living Systems	3
BIOB 161N	Prncpls of Living Systems Lab	1
BIOB 260	Cellular and Molecular Biology	4
BIOB 272	Genetics and Evolution	4
Total Hours		12

Minimum Required Grade: C-

Computer Science

Course List		
CODE	**TITLE**	**HOURS**
Complete the following course:		
CSCI 125	Computation in the Sciences	3
Total Hours		3

Minimum Required Grade: C-

Physics

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
PHSX 215N & PHSX 216N	Fund of Physics w/Calc I and Physics Laboratory I w/Calc	5
PHSX 217N & PHSX 218N	Fund of Physics w/Calc II and Physics Laboratory II w/Calc	5
Total Hours		10

Minimum Required Grade: C-

Mathematics

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
M 171	Calculus I	4
M 172	Calculus II	4
Total Hours		8

Minimum Required Grade: C-

Upper-Division Core Courses

Analytical Chemistry

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
CHMY 311	Analytical Chem-Quant Analysis	4
CHMY 421	Advanced Instrument Analysis	4
Total Hours		8

Minimum Required Grade: C-

Physical Chemistry

Course List		
CODE	**TITLE**	**HOURS**
Complete the following course:		
CHMY 373	Phys Chem-Kntcs & Thrmdynmcs	4
Total Hours		4

Minimum Required Grade: C-

Inorganic Chemistry

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
CHMY 401	Advanced Inorganic Chemistry	3
CHMY 402	Advanced Inorganic Chem Lab	2
Total Hours		5

Minimum Required Grade: C-

Biochemistry

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
BCH 480	Advanced Biochemistry I	3
BCH 482	Advanced Biochemistry II	3
BCH 486	Biochemistry Research Lab	3
Total Hours		9

Minimum Required Grade: C-

Pharmacology

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
PHAR 421	Medicinal Chem I	3
PHAR 422	Medicinal Chem II	3
PHAR 443	Pharmacol & Toxicol I	4
PHAR 444	Pharmacology & Toxicol II	4
Total Hours		14

Minimum Required Grade: C-

Advanced College Writing Requirement

Rule: To complete the Advanced College Writing Requirement, Chemistry students may take the following courses or any other stand-alone advanced writing course.

		Course List
CODE	**TITLE**	**HOURS**
BCH 482	Advanced Biochemistry II	3
BCH 486	Biochemistry Research Lab	3

Minimum Required Grade: C-

Chemistry Minor < University of Montana

Chemistry Minor

Minor - Chemistry

College of Humanities & Sciences

Degree Specific Credits: 36-38

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Summary

CODE	TITLE	HOURS
Lower-Division Core Courses		18
Upper-Division Core Courses		8
Physical Chemistry Requirement		4
Upper-Division Electives		6-8
Teaching Chemistry Track		
Total Hours		36-38

Course List

Lower-Division Core Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
CHMY 141N & CHMY 142N	College Chemistry I and College Chemistry I Lab	5
CHMY 143N & CHMY 144N	College Chemistry II and College Chemistry II Lab	5
CHMY 221	Organic Chemistry I	3
CHMY 222	Organic Chemistry I Lab	2
CHMY 223	Organic Chemistry II	3
Total Hours		18

Course List

Minimum Required Grade: C-

Upper-Division Core Courses

CODE	TITLE	HOURS
Complete the following course:		
CHMY 311	Analytical Chem-Quant Analysis	4
Total Hours		4

Course List

Minimum Required Grade: C-

Physical Chemistry Requirement

CODE	TITLE	HOURS
Complete the following course:		
CHMY 373	Phys Chem-Kntcs & Thrmdynmcs	4
Total Hours		4

Course List

Minimum Required Grade: C-

Upper-Division Electives

Note: If the student's major requires Biochemistry, BCH 380 or BCH 480 and BCH 482 may not be used to satisfy this requirement.

CODE	TITLE	HOURS
Complete two of the following courses:		6-8
BCH 380	Biochemistry	
BCH 480	Advanced Biochemistry I	
BCH 482	Advanced Biochemistry II	
CHMY 371	Phys Chem-Qntm Chm & Spctrscpy	
CHMY 401	Advanced Inorganic Chemistry	
CHMY 442	Aquatic Chemistry	
CHMY 465	Organic Spectroscopy	
Total Hours		6-8

Course List

Minimum Required Grade: C-

Teaching Chemistry Track

Notes:

- This teaching track contains different/additional course requirements designed to meet state standards. Those interested in teaching in K-12 schools must complete the teaching track of a major in a teaching content area plus the Teacher Education Program through the Department of Teaching and Learning. Additional teaching areas can be added through completion of the teaching track of a major or minor in that content area.
  - Secondary Education Licensure Program
  - Licensure Degree Requirements
- To complete this teaching track, you need to contact the Teaching and Learning Department. You do not fill out a major/minor form for graduation or the major/minor/concentration section of the major change form. Approvals for this track must come from the Teaching and

Learning Department.
- Tracks will not appear on your UM transcript, diploma, university lists, student data system, or university publications. They are used for advising purposes only. You do not fill out a major change for a track.
- Individuals completing the teaching track of this minor must also complete the teaching track of a major in another teaching content area.

Teaching Chemistry Track Requirements

Note: The EDU 497 course number is used for multiple courses. Students should register for EDU 497 Methods: 5-12 Science.

CODE	TITLE	HOURS
Complete all of the following courses:		
EDU 497	Teaching and Assessing	4
ENST 472	Gen Sci: Conservation Education	3
Total Hours		7

Course List

Minimum Required Grade: C-

Secondary Teaching Licensure

Note: For endorsement to teach chemistry, a student also must gain admission to the Teacher Education Program and meet all the requirements for secondary teaching licensure. For more information, see the Teaching and Learning Department.

Communication Studies Department < University of Montana

Communication Studies Department

- Overview
- Programs

Gregory Larson, 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.

Undergraduate

- Communication Studies B.A.
- Communications Studies B.A., Communication & Human Relationships Concentration
- Communications Studies B.A., Organizational Communication Concentration
- Communications Studies B.A., Rhetoric and Public Discourse Concentration

Undergraduate Minors

- Communication Studies

Undergraduate Certificates

- Health Communication

Communication Studies B.A.

Bachelor of Arts - Communication Studies

College of Humanities & Sciences

Degree Specific Credits: 39-40

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: To graduate with a degree in Communication Studies, the student must complete 36 COMX credits with 18 of those credits in courses numbered 300 or above. Students must also complete an approved Statistics course (3 credits). A maximum of 6 credits in COMX 312 and a maximum of 6 credits in COMX 398 may count toward a major in Communication Studies.

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

Course List		
CODE	**TITLE**	**HOURS**
Lower-Division Core Courses		12
Upper-Division Core Courses		6
Research		
Upper-Division Writing		
Additional Major Electives		18
Statistics Requirement		3-4
Total Hours		39-40

Lower-Division Core Courses

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
COMX 111A	Introduction to Public Speaking	3
COMX 115S	Introduction to Interpersonal Communications	3
COMX 220S	Introduction to Organizational Communication	3
COMX 240H	Introduction to Rhetorical Theory	3
Total Hours		12

Minimum Required Grade: C-

Upper-Division Core Courses

Rule: Complete the following subcategories. 6 total credits required.

Research

Note: Students taking COMX 460 in the fall semester will also be required to take COMX 461. Those taking COMX 460 in the spring or summer are exempt from this requirement.

Course List		
CODE	**TITLE**	**HOURS**
Complete the following course:		
COMX 460	Research Methods	3
Total Hours		3

Minimum Required Grade: C-

Upper-Division Writing

Course List		
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		3
COMX 347	Rhetoric, Nature, and Environmentalism	
COMX 413	Communication and Conflict-Writing	
COMX 414	Communication in Personal Relationshps	
COMX 421	Communication in Nonprofit Organizations	
COMX 422	Communication and Technology	
COMX 424	Risk, Crisis, and Communication	
COMX 445	Rhetorical Criticism and Theory	
COMX 447	Rhetorical Contruction of Women	
COMX 449	Rhetoric of Women's Activism	
Total Hours		3

Minimum Required Grade: C-

Additional Major Electives

Course List		
CODE	**TITLE**	**HOURS**
Complete 18 COMX credits to achieve a total of 36 COMX credits for the degree.		18
Total Hours		18

Minimum Required Grade: C-

Statistics Requirement

Course List		
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		3-4
EDU 421	Statistical Procedures in Educ	
PSYX 222	Psychological Statistics	
SOCI 202	Social Statistics	
STAT 216	Introduction to Statistics	
Total Hours		3-4

Minimum Required Grade: C-

Communication Studies B.A. - Communication and Human Relationships < University of Montana

Communication Studies B.A. - Communication and Human Relationships

Bachelor of Arts - Communication Studies; Communication & Human Relationships Concentration

College of Humanities & Sciences

Degree Specific Credits: 51-52

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: To graduate with a degree in Communication Studies, the student must complete 36 COMX credits with 18 of those credits in courses numbered 300 or above. Students must also complete an approved statistics course. For the Human Relationships concentration, students must complete an additional 12 credits in allied courses to reach 48 total degree credits. A maximum of 6 credits in COMX 312 and a maximum of 6 credits in COMX 398 may count toward a major in Communication Studies.

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

CODE	TITLE	HOURS
Lower-Division Core Courses		12
Upper-Division Core Courses		6
Research		
Upper-Division Writing		
Comm & Human Relationships Concentration		30
Major Courses		
Allied Courses		
Additional Major Electives		
Statistics Requirement		3-4
Total Hours		51-52

Course List

Lower-Division Core Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
COMX 111A	Introduction to Public Speaking	3
COMX 115S	Introduction to Interpersonal Communications	3
COMX 220S	Introduction to Organizational Communication	3
COMX 240H	Introduction to Rhetorical Theory	3
Total Hours		12

Course List

Minimum Required Grade: C-

Upper-Division Core Courses

Rule: Complete the following subcategories. 6 total credits required.

Research

Note: Students taking COMX 460 in the fall or spring semester will also be required to take COMX 461. Those taking COMX 460 in summer are exempt from this requirement.

CODE	TITLE	HOURS
Complete the following course:		
COMX 460	Research Methods	3
Total Hours		3

Course List

Minimum Required Grade: C-

Upper-Division Writing

CODE	TITLE	HOURS
Complete one of the following courses:		3
COMX 347	Rhetoric, Nature, and Environmentalism	
COMX 413	Communication and Conflict-Writing	
COMX 414	Communication in Personal Relationshps	
COMX 421	Communication in Nonprofit Organizations	
COMX 422	Communication and Technology	
COMX 424	Risk, Crisis, and Communication	
COMX 445	Rhetorical Criticism and Theory	
COMX 447	Rhetorical Contruction of Women	
COMX 449	Rhetoric of Women's Activism	
Total Hours		3

Course List

Minimum Required Grade: C-

Communication & Human Relationships Concentration

Rule: Complete the following subcategories. 30 total credits required.

Major Courses

CODE	TITLE	HOURS
Complete five of the following courses:		15
COMX 202S	Nonverbal Communication	
COMX 311	Family Communication	
COMX 380	Gender and Communication	
COMX 412	Communication and Conflict	
COMX 413	Communication and Conflict-Writing	
COMX 414	Communication in Personal Relationshps	
COMX 415	Intercultural Communication	
COMX 485	Communication and Health	
Total Hours		15

Course List

Minimum Required Grade: C-

Allied Courses

CODE	TITLE	HOURS
Complete four of the following courses:		12
ANTY 220S	Culture & Society	
ANTY 330X	Peoples and Cultures of World	
ANTY 426	Culture, Health and Healing	
ANTY 427	Anthropology of Gender	
COUN 242S	Intimate Relationships	
COUN 475	Forgiveness & Reconcilia	
COUN 485	Counseling Theories	
PSYX 230	Developmental Psychology	
PSYX 233	Fund of Psychology of Aging	
PSYX 345	Child & Adolescent Psych Disorders	
PSYX 348	Psychology of Family Violence	
PSYX 360	Social Psychology	
PSYX 385	Psychology of Personality	
S W 420	Child Abuse/Child Welfare	
S W 455	Social Gerontology	
SOCI 220S	Race, Gender & Class	
SOCI 260S	Introduction to Juvenile Delinquency	
SOCI 275S	Gender and Society	
SOCI 332	Sociology of the Family	
SOCI 350	The Community	
SOCI 382	Soc Psych and Social Structure	
Total Hours		12

Course List

Minimum Required Grade: C-

Additional Major Electives

CODE	TITLE	HOURS
Complete 3 additional COMX credits to achieve a total of 36.		3

Course List

Minimum Required Grade: C-

Statistics Requirement

CODE	TITLE	HOURS
Complete one of the following courses:		3-4
EDU 421	Statistical Procedures in Educ	
PSYX 222	Psychological Statistics	
SOCI 202	Social Statistics	
STAT 216	Introduction to Statistics	
Total Hours		3-4

Course List

Minimum Required Grade: C-

Communication Studies B.A. - Organizational Communication < University of Montana

Communication Studies B.A. - Organizational Communication

Bachelor of Arts - Communication Studies; Organizational Communication Concentration

College of Humanities & Sciences

Degree Specific Credits: 48

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: To graduate with a degree in Communication Studies, the student must complete 36 COMX credits with 18 of those credits in courses numbered 300 or above. Students must also complete an approved statistics course (3 credits). For the Organizational Communication concentration, students must complete an additional 9 credits in Allied courses to reach 48 degree credits. A maximum of 6 credits in COMX 312 and a maximum of 6 credits in COMX 398may count toward a major in communication studies.

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

CODE	TITLE	HOURS
Lower-Division Core Courses		12
Upper-Division Core Courses		6
Research		
Upper-Division Writing		
Organizational Communication Concentration		27
Major Courses		
Allied Courses		
Additional Major Electives		
Statistics Requirement		3-4
Total Hours		48-49

Course List

Lower-Division Core Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
COMX 111A	Introduction to Public Speaking	3
COMX 115S	Introduction to Interpersonal Communications	3
COMX 220S	Introduction to Organizational Communication	3
COMX 240H	Introduction to Rhetorical Theory	3
Total Hours		12

Course List

Minimum Required Grade: C-

Upper-Division Core Courses

Rule: Complete the following subcategories. 6 total credits required.

Research

Note: Students must complete an approved Statistics course prior to taking COMX 460. Students taking COMX 460 in the fall or spring semester will also be required to take COMX 461. Those taking COMX 460 in summer are exempt from this requirement.

CODE	TITLE	HOURS
Complete the following course:		
COMX 460	Research Methods	3
Total Hours		3

Course List

Minimum Required Grade: C-

Upper-Division Writing

Note: One of these courses is required to complete the upper-division writing requirement in the major. This counts toward the total credits needed for the major.

CODE	TITLE	HOURS
Complete one of the following courses:		3
COMX 347	Rhetoric, Nature, and Environmentalism	
COMX 413	Communication and Conflict-Writing	
COMX 414	Communication in Personal Relationshps	
COMX 421	Communication in Nonprofit Organizations	
COMX 422	Communication and Technology	
COMX 424	Risk, Crisis, and Communication	
COMX 445	Rhetorical Criticism and Theory	
COMX 447	Rhetorical Contruction of Women	
COMX 449	Rhetoric of Women's Activism	
Total Hours		3

Course List

Minimum Required Grade: C-

Organizational Communication Concentration

Rule: Complete the following subcategories. 27 total credits required.

Major Courses

CODE	TITLE	HOURS
Complete five of the following courses:		15
COMX 210	Communication in Small Groups	
COMX 351	Principles of Public Relations	
COMX 352	Public Relations Portfolio	
COMX 412	Communication and Conflict	
COMX 413	Communication and Conflict-Writing	
COMX 415	Intercultural Communication	
COMX 421	Communication in Nonprofit Organizations	
COMX 422	Communication and Technology	
COMX 423	Organizational Communication Consulting and Training	
COMX 424	Risk, Crisis, and Communication	
COMX 425	Communication in Health Organizations	
Total Hours		15

Course List

Minimum Required Grade: C-

Allied Courses

CODE	TITLE	HOURS
Complete three of the following courses:		9
BMGT 340	Management & Organization Behavior	
BMGT 444	Management Communications	
BMGT 480	Cross-Cultural Mgmt	
BMKT 325	Principles of Marketing	
BMKT 343	Integrated Marketing Comm	
BMKT 412	Non Profit Marketing	
CHTH 355	Theory Practicum Community Health Education	
CHTH 445	Program Planning in Community Health	
HTH 465	Leading Health and, Human Perform Orgs	
NPAD 460	Nonprofit Marketing and Social Media	
NPAD 466	Nonprofit Adm & Pub Svc	
PSCI 361	Public Administration	
PSCI 462	Human Resource Management	
SOCI 306	Sociology of Work	
SOCI 345	Sociology of Organizations	
SOCI 471	Gender and Global Development	
Total Hours		9

Course List

Minimum Required Grade: C-

Additional Major Electives

CODE	TITLE	HOURS
Complete 3 additional COMX credits to achieve a total 36.		3

Course List

Minimum Required Grade: C-

Statistics Requirement

CODE	TITLE	HOURS
Complete one of the following courses:		3-4
EDU 421	Statistical Procedures in Educ	
PSYX 222	Psychological Statistics	
SOCI 202	Social Statistics	
STAT 216	Introduction to Statistics	
Total Hours		3-4

Course List

Minimum Required Grade: C-

Communication Studies B.A. - Rhetoric and Public Discourse < University of Montana

Communication Studies B.A. - Rhetoric and Public Discourse

Bachelor of Arts - Communication Studies; Rhetoric and Public Discourse Concentration

College of Humanities & Sciences

Degree Specific Credits: 51-52

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: To graduate with a degree in Communication Studies, the student must complete 36 COMX credits with 18 of those credits in courses numbered 300 or above. Students must also complete an approved statistics course.

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

CODE	TITLE	HOURS
Lower-Division Core Courses		12
Upper-Division Core Courses		6
Research		
Upper-division Writing		
Rhetoric & Public Discourse Concentration		30
Major Courses		
Allied Courses		
Additional Major Electives		
Statistics Requirement		3-4
Total Hours		51-52

Course List

Lower-Division Core Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
COMX 111A	Introduction to Public Speaking	3
COMX 115S	Introduction to Interpersonal Communications	3
COMX 220S	Introduction to Organizational Communication	3
COMX 240H	Introduction to Rhetorical Theory	3
Total Hours		12

Course List

Minimum Required Grade: C-

Upper-Division Core Courses

Rule: Complete the following subcategories. 6 total credits required.

Research

Note: Students must complete an approved Statistics course prior to taking COMX 460. Students taking COMX 460 in the fall or spring semester will also be required to take COMX 461. Those taking COMX 460 in summer are exempt from this requirement.

CODE	TITLE	HOURS
Complete the following course:		
COMX 460	Research Methods	3
Total Hours		3

Course List

Minimum Required Grade: C-

Upper-Division Writing Course

CODE	TITLE	HOURS
Choose one of the following courses:		3
COMX 347	Rhetoric, Nature, and Environmentalism	
COMX 413	Communication and Conflict-Writing	
COMX 414	Communication in Personal Relationshps	
COMX 421	Communication in Nonprofit Organizations	
COMX 422	Communication and Technology	
COMX 424	Risk, Crisis, and Communication	
COMX 445	Rhetorical Criticism and Theory	
COMX 447	Rhetorical Contruction of Women	
COMX 449	Rhetoric of Women's Activism	
Total Hours		3

Course List

Minimum Required Grade: C-

Rhetoric & Public Discourse Concentration

Rule: Complete the following subcategories. 27 total credits required.

Major Courses

CODE	TITLE	HOURS
Complete four of the following courses:		12
COMX 241	Persuasive Communication	
COMX 242	Argumentation	
COMX 343	Persuasive Speaking and Criticism	
COMX 347	Rhetoric, Nature, and Environmentalism	
COMX 349	Communication, Consumption, and Climate	
COMX 380	Gender and Communication	
COMX 445	Rhetorical Criticism and Theory	
COMX 447	Rhetorical Contruction of Women	
COMX 449	Rhetoric of Women's Activism	
COMX 191	Special Topics	
or COMX 291	Special Topics	
or COMX 391	Special Topics	
or COMX 491	Special Topics	
Total Hours		12

Course List

Minimum Required Grade: C-

Allied Courses

CODE	TITLE	HOURS
Complete four of the following courses:		12
ANTY 102H	Intro to South & S. East Asia	
ECNS 433	Economics of the Environment	
ECNS 445	Int Env Econ & Clim Change	
ENST 230H	Nature and Society	
ENST 367	Environmental Politics & Policies	
ENST 420	US Environmental Movement	
HSTA 102H	American History II	
HSTA 262	Abolitionism	

CODE	TITLE	HOURS
HSTA 321	America in Crisis	
HSTA 322	U.S. History: WWII to Present	
HSTA 344	African-American Struggle for Equality	
HSTR 272E	Terrorism:Viol Mod Wrld	
HSTR 302H	Ancient Greece	
HSTR 364	Environmental History	
MART 101L	Intro to Media Arts	
NRSM 349E	Climate Change Ethics/Policy	
PHL 112E	Intro Ethics and Environment	
PHL 235	Intro to Logic: Induction	
PHL 422	Environmental Philosophy	
PSCI 250E	Intro to Political Theory	
PSCI 342	Media, Public Opinion, Polling	
PSCI 352	American Political Thought	
PSCI 444	Am Political Participation	
PSCI 471	American Constitutional Law	
SOCI 220S	Race, Gender & Class	
SOCI 325	Social Stratification	
SOCI 350	The Community	
SOCI 470	Environmental Sociology	
SOCI 485	Political Sociology	
WGSS 263S	Social and Political Perspectives on Gender and Sexuality	
WGSS 363	Feminist Theory and Methods	
Total Hours		12

Course List

Minimum Required Grade: C-

Additional Major Electives

CODE	TITLE	HOURS
Complete 3 additional COMX credits to achieve a total 36.		3

Course List

Minimum Required Grade: C-

Statistics Requirement

CODE	TITLE	HOURS
Complete one of the following courses:		3-4
EDU 421	Statistical Procedures in Educ	
PSYX 222	Psychological Statistics	
SOCI 202	Social Statistics	
STAT 216	Introduction to Statistics	
Total Hours		3-4

Course List

Minimum Required Grade: C-

Communication Studies Minor < University of Montana

Communication Studies Minor

Minor - Communication Studies

College of Humanities & Sciences

Degree Specific Credits: 20

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: The Communication Studies minor requires a minimum of 20 credits in COMX courses, with at least 9 credits in courses numbered 300 and above.

Summary

CODE	TITLE	HOURS
Lower-Division Core Courses		3
Electives		17
Total Hours		20

Course List

Lower-Division Core Courses

CODE	TITLE	HOURS
Complete the following course:		
COMX 111A	Introduction to Public Speaking	3
Total Hours		3

Course List

Minimum Required Grade: C-

Electives

Note: A maximum of 6 credits in COMX 312 may count toward a minor in Communication Studies.

CODE	TITLE	HOURS
Complete 17 credits from the following courses:		17
COMX 115S	Introduction to Interpersonal Communications	
COMX 140L	Introduction to Visual Rhetoric	
COMX 191	Special Topics	
COMX 192	Independent Study	
COMX 202S	Nonverbal Communication	
COMX 204X	International and Development Communication	

CODE	TITLE	HOURS
COMX 210	Communication in Small Groups	
COMX 212X	Introduction to Intercultural Communication	
COMX 217A	Oral Interpretation of Lit	
COMX 219S	Survey of Children's Comm	
COMX 220S	Introduction to Organizational Communication	
COMX 222	Professional Communication	
COMX 240H	Introduction to Rhetorical Theory	
COMX 241	Persuasive Communication	
COMX 242	Argumentation	
COMX 250	Intro to Public Relations	
COMX 291	Special Topics	
COMX 292	Independent Study	
COMX 311	Family Communication	
COMX 312	Forensics/Honors	
COMX 343	Persuasive Speaking and Criticism	
COMX 347	Rhetoric, Nature, and Environmentalism	
COMX 349	Communication, Consumption, and Climate	
COMX 351	Principles of Public Relations	
COMX 352	Public Relations Portfolio	
COMX 380	Gender and Communication	
COMX 391	Special Topics	
COMX 412	Communication and Conflict	
COMX 413	Communication and Conflict-Writing	
COMX 414	Communication in Personal Relationshps	
COMX 415	Intercultural Communication	
COMX 421	Communication in Nonprofit Organizations	
COMX 422	Communication and Technology	
COMX 423	Organizational Communication Consulting and Training	
COMX 424	Risk, Crisis, and Communication	
COMX 425	Communication in Health Organizations	
COMX 445	Rhetorical Criticism and Theory	
COMX 447	Rhetorical Contruction of Women	

CODE	TITLE	HOURS
COMX 449	Rhetoric of Women's Activism	
COMX 460	Research Methods	
COMX 461	Communication Research Seminar	
COMX 485	Communication and Health	
COMX 491	Special Topics	
COMX 492	Independent Study	
Total Hours		17

Course List

Minimum Required Grade: C-

Health Communication < University of Montana

Health Communication

Post-secondary Certificate - Health Communication

College of Humanities & Sciences

Degree Specific Credits: 12

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Summary

CODE	TITLE	HOURS
Required Course		3
Electives		9
Health Communication Electives		
Approved Communication Skills Course		
Total Hours		12

Course List

Required Course

CODE	TITLE	HOURS
Complete the following course:		
COMX 480	Health Communication	3
Total Hours		3

Course List

Minimum Required Grade: C-

Electives

Health Communication Electives

CODE	TITLE	HOURS
Complete two of the following courses:		6
COMX 425	Communication in Health Organizations	
COMX 485	Communication and Health	
COMX 491	Special Topics (Social and Behavior Change)	
Total Hours		6

Course List

Minimum Required Grade: C-

Approved Communication Skills Course

CODE	TITLE	HOURS
Take one of the following courses:		3
COMX 210	Communication in Small Groups	
COMX 241	Persuasive Communication	
COMX 242	Argumentation	
COMX 351	Principles of Public Relations	
COMX 412	Communication and Conflict	
COMX 414	Communication in Personal Relationshps	
COMX 424	Risk, Crisis, and Communication	
Total Hours		3

Course List

Minimum Required Grade: C-

Computer Science Department < University of Montana

Computer Science Department

- Overview
- Programs

Jesse Johnson, 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. For more information, access the Computer Science Department homepage or email the chair Jesse Johnson.

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.

Undergraduate

- Computer Science B.S.
- Computer Science-Mathematical Sciences Combined Major

Undergraduate Minors

- Computer Applications
- Computer Science
- Computer Science Teaching Minor

Undergraduate Certificates

- Bioinformatics Professional Certificate
- Computer Programming Professional Certificate

Computer Science B.S. < University of Montana

Computer Science B.S.

Bachelor of Science - Computer Science

College of Humanities & Sciences

Degree Specific Credits: 86-91

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

CODE	TITLE	HOURS
Computer Science Core Courses		32
Degree Electives		18
Professional Track		
Interdisciplinary Track		
Communication		3
Mathematics		18
Science Core		9-10
Biology		
Chemistry		
Physics		
Science Electives		6-10
Total Hours		86-91

Course List

Computer Science Core Courses

Note: 100-level CSCI courses other than CSCI 106, CSCI 135-CSCI 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.

CODE	TITLE	HOURS
Complete all of the following courses:		
CSCI 106	Careers in Computer Science	1
CSCI 135	Fund of Computer Science I	3
CSCI 136	Fund of Computer Science II	3
CSCI 205	Programming with C/C++	3
CSCI 232	Data Structures and Algorithms	4
CSCI 315E	Computers, Ethics, and Society	3
CSCI 323	Software Science	3
CSCI 332	Design/Analysis of Algorithms	3
CSCI 361	Computer Architecture	3
CSCI 426	Adv Prgrmng Theory/Practice I	3
CSCI 427	Adv Prgrmng Theory/Practice II	3
Total Hours		32

Course List

Minimum Required Grade: C-

Degree Electives

Rule: This elective requirement can be completed in two ways: the Professional Track or the Interdisciplinary Track.

Professional Track

Note: A maximum of 3 of the 18 credits of Computer Science electives may be in CSCI 398 or CSCI 498.

CODE	TITLE	HOURS
Complete 18 credits of the following courses:		18
CSCI 340	Database Design	
CSCI 390	Research	
CSCI 391	Special Topics	
CSCI 394	Seminar	
CSCI 398	Internship	
CSCI 411	Advanced Web Programming	
CSCI 412	Game and Mobile App	
CSCI 441	Computer Graphics Programming	
CSCI 443	User Interface Design	
CSCI 444	Data Visualization	
CSCI 446	Artificial Intelligence	
CSCI 447	Machine Learning	
CSCI 448	Pattern Recognition	
CSCI 451	Computational Biology	
CSCI 460	Operating Systems	
CSCI 466	Networks	
CSCI 477	Simulation	
CSCI 490	Research	
CSCI 491	Special Topics	
CSCI 494	Seminar	
CSCI 498	Internship	
CSCI 499	Senior Thesis/Capstone	
Total Hours		18

Course List

Minimum Required Grade: C-

Interdisciplinary Track

Note: This track is available to students who complete all the requirements for a minor or an additional major in any field other than Computer Science.

CODE	TITLE	HOURS
Complete 6 credits of the courses listed above in the Professional Track.		6
Complete 12 credits 200-level courses or above in a field other than Computer Science.		12
Total Hours		18

Course List

Communication

CODE	TITLE	HOURS
Complete one of the following courses:		3
COMX 111A	Introduction to Public Speaking	
COMX 242	Argumentation	
Total Hours		3

Course List

Minimum Required Grade: C-

Mathematics

CODE	TITLE	HOURS
Complete all of the following courses:		
M 171	Calculus I	4
M 172	Calculus II	4
M 221	Introduction to Linear Algebra	4
M 225	Introduction to Discrete Mathematics	3
STAT 341	Introduction to Probability and Statistics	3
Total Hours		18

Course List

Minimum Required Grade: C-

Science Core

Rule: Complete 1 of the following subcategories of science sequences. 9-10 total credits required.

Biology Sequence Option

CODE	TITLE	HOURS
Complete all of the following courses:		
BIOB 160N	Principles of Living Systems	3
BIOB 161N	Prncpls of Living Systems Lab	1
BIOB 170N	Princpls Biological Diversity	3
BIOB 171N	Princpls Biological Dvrsty Lab	2
Total Hours		9

Course List

Minimum Required Grade: C-

Chemistry Sequence Option

CODE	TITLE	HOURS
Complete all of the following courses:		
CHMY 141N & CHMY 142N	College Chemistry I and College Chemistry I Lab	5
CHMY 143N & CHMY 144N	College Chemistry II and College Chemistry II Lab	5
Total Hours		10

Course List

Minimum Required Grade: C-

Physics Sequence Option

CODE	TITLE	HOURS
Complete all of the following courses:		
PHSX 215N	Fund of Physics w/Calc I	4
PHSX 216N	Physics Laboratory I w/Calc	1
PHSX 217N	Fund of Physics w/Calc II	4
PHSX 218N	Physics Laboratory II w/Calc	1
Total Hours		10

Course List

Minimum Required Grade: C-

Science Electives

Rule: Complete 2 of the following courses. Laboratory courses must be taken in conjunction with their associated lecture course.

Note: The Biology, Chemistry, or Physics sequence chosen to fulfill the science core may not count toward the science electives requirement.

CODE	TITLE	HOURS
Complete two of the following courses:		6-10
ASTR 131N & ASTR 134N	Planetary Astronomy and Planetary Astronomy Lab	
ASTR 132N & ASTR 135N	Stars, Galaxies, and the Universe and Stars, Galaxies, and the Universe Lab	
BIOB 160N & BIOB 161N	Principles of Living Systems and Prncpls of Living Systems Lab	
BIOB 170N & BIOB 171N	Princpls Biological Diversity and Princpls Biological Dvrsty Lab	
BIOM 250N & BIOM 251	Microbiology for Hlth Sciences and Microbiology Hlth Sciences Lab	
CHMY 141N & CHMY 142N	College Chemistry I and College Chemistry I Lab	
CHMY 143N & CHMY 144N	College Chemistry II and College Chemistry II Lab	
FORS 201	Forest Biometrics	
GEO 101N & GEO 102N	Introduction to Physical Geology and Introduction to Physical Geology Lab	
GEO 225	Earth Materials	
PHSX 215N & PHSX 216N	Fund of Physics w/Calc I and Physics Laboratory I w/Calc	
PHSX 217N & PHSX 218N	Fund of Physics w/Calc II and Physics Laboratory II w/Calc	
PHSX 343	Modern Physics	
PHSX 444	Advanced Physics Lab	
Total Hours		6-10

Course List

Minimum Required Grade: C-

Computer Science-Mathematical Sciences (Combined Major) < University of Montana

Computer Science-Mathematical Sciences (Combined Major)

- Overview
- Requirements

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 Science-Mathematical Science

College of Humanities & Sciences

Degree Specific Credits: 72-73

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

CODE	TITLE	HOURS
Mathematical Science		31
Computer Science		29
Science Requirement		9-10
Biology Sequence Option		
Chemistry Sequence Option		
Physics Sequence Option		
Public Speaking Requirement		3
Total Hours		72-73

Course List

Mathematical Sciences

Rule: Complete the following subcategories. 31 total credits required.

Mathematical Sciences Core

CODE	TITLE	HOURS
Complete all of the following courses:		
M 171	Calculus I	4
or M 181	Honors Calculus I	
M 172	Calculus II	4
or M 182	Honors Calculus II	
M 221	Introduction to Linear Algebra	4
M 273	Multivariable Calculus	4
M 307	Introduction to Abstract Mathematics	3
or M 225	Introduction to Discrete Mathematics	
Total Hours		19

Course List

Minimum Required Grade: C-

Mathematical Sciences Electives

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, STAT 452).

CODE	TITLE	HOURS
Complete 12 credits of the following courses:		12
M 311	Ordinary Differential Equations and Systems	
M 325	Discrete Mathematics	
M 326	Number Theory	
M 361	Discrete Optimization	
M 362	Linear Optimization	
M 381	Advanced Calculus I	
M 412	Partial Differential Equations	
M 414	Deterministic Models	
M 429	History of Mathematics	
M 431	Abstract Algebra I	
M 432	Abstract Algebra II	
M 439	Euclidean and NonEuclidean Geometry	
M 440	Numerical Analysis	
M 445	Statistical, Dynamical, and Computational Modeling	
M 461	Data Science Analytics	
M 462	Theoretical Basics of Big Data Analytics and Real Time Computation Algorithms	
M 472	Introduction to Complex Analysis	
M 473	Introduction to Real Analysis	
M 485	Graph Theory	
STAT 341	Introduction to Probability and Statistics	
STAT 421	Probability Theory	
STAT 422	Mathematical Statistics	
STAT 451	Statistical Methods I	
STAT 452	Statistical Methods II	
Total Hours		12

Course List

Minimum Required Grade: C-

Computer Science

Rule: Complete the following subcategories. 30 total credits required.

Computer Science Core

CODE	TITLE	HOURS
Complete all of the following courses:		
CSCI 106	Careers in Computer Science	1
CSCI 135	Fund of Computer Science I	3
CSCI 136	Fund of Computer Science II	3
CSCI 205	Programming with C/C++	3
CSCI 232	Data Structures and Algorithms	4
CSCI 332	Design/Analysis of Algorithms	3
CSCI 361	Computer Architecture	3
Total Hours		20

Course List

Minimum Required Grade: C-

Computer Science Electives

Note:

1. A total of at most three of the nine credits of Computer Science Electives may be in CSCI 398 or CSCI 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, STAT 452).

CODE	TITLE	HOURS
Complete 9 credits of the following courses:		9
CSCI 315E	Computers, Ethics, and Society	
CSCI 323	Software Science	
CSCI 340	Database Design	
CSCI 390	Research	
CSCI 391	Special Topics	
CSCI 394	Seminar	
CSCI 398	Internship	
CSCI 411	Advanced Web Programming	
CSCI 412	Game and Mobile App	
CSCI 426	Adv Prgrmng Theory/Practice I	
CSCI 427	Adv Prgrmng Theory/Practice II	
CSCI 441	Computer Graphics Programming	
CSCI 443	User Interface Design	
CSCI 444	Data Visualization	
CSCI 446	Artificial Intelligence	
CSCI 447	Machine Learning	
CSCI 448	Pattern Recognition	
CSCI 451	Computational Biology	
CSCI 460	Operating Systems	
CSCI 464	Applications of Mining Big Data	
CSCI 466	Networks	
CSCI 477	Simulation	
CSCI 480	Applied Parallel Computing Techniques	
CSCI 490	Research	
CSCI 491	Special Topics	
CSCI 494	Seminar	
CSCI 498	Internship	
CSCI 499	Senior Thesis/Capstone	
Total Hours		9

Course List

Minimum Required Grade: C-

Science Requirement

Rule: Complete 1 of the following subcategories. 9-10 total credits required.

Biology Sequence Option

CODE	TITLE	HOURS
Complete all of the following courses:		
BIOB 160N	Principles of Living Systems	3
BIOB 161N	Prncpls of Living Systems Lab	1
BIOB 170N	Princpls Biological Diversity	3
BIOB 171N	Princpls Biological Dvrsty Lab	2
Total Hours		9

Course List

Minimum Required Grade: C-

Chemistry Sequence Option

CODE	TITLE	HOURS
Complete all of the following courses:		
CHMY 141N & CHMY 142N	College Chemistry I and College Chemistry I Lab	5
CHMY 143N & CHMY 144N	College Chemistry II and College Chemistry II Lab	5
Total Hours		10

Course List

Minimum Required Grade: C-

Physics Sequence Option

CODE	TITLE	HOURS
Complete all of the following courses:		
PHSX 215N	Fund of Physics w/Calc I	4
PHSX 216N	Physics Laboratory I w/Calc	1
PHSX 217N	Fund of Physics w/Calc II	4
PHSX 218N	Physics Laboratory II w/Calc	1
Total Hours		10

Course List

Minimum Required Grade: C-

Public Speaking Requirement

CODE	TITLE	HOURS
Complete 1 of the following courses:		3
COMX 111A	Introduction to Public Speaking	
COMX 242	Argumentation	
Total Hours		3

Course List

Minimum Required Grade: C-

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. Note that the suggested curricula do not include an advanced College Writing Course.

Applied Math Scientific Programming

CODE	TITLE	HOURS
M 311	Ordinary Differential Equations and Systems	3
M 412	Partial Differential Equations	3
M 414	Deterministic Models	3
Select one of the following:		3-4
M 381	Advanced Calculus I	
M 440	Numerical Analysis	
M 472	Introduction to Complex Analysis	
M 473	Introduction to Real Analysis	
STAT 341	Introduction to Probability and Statistics	
Select three of the following:		9
CSCI 441	Computer Graphics Programming	
CSCI 444	Data Visualization	
CSCI 460	Operating Systems	
CSCI 477	Simulation	
Total Hours		21-22

Course List

Combinatorics and Optimization Artificial Intelligence

CODE	TITLE	HOURS
M 361	Discrete Optimization	3
M 362	Linear Optimization	3
Select two of the following:		6
M 325	Discrete Mathematics	
M 414	Deterministic Models	
M 485	Graph Theory	
STAT 341	Introduction to Probability and Statistics	
CSCI 446	Artificial Intelligence	3
CSCI 447	Machine Learning	3
CSCI 460	Operating Systems	3
Total Hours		21

Course List

Data Science (Big Data Analytics)

CODE	TITLE	HOURS
M 461	Data Science Analytics	3
M 462	Theoretical Basics of Big Data Analytics and Real Time Computation Algorithms	3
STAT 341	Introduction to Probability and Statistics	3
STAT 451	Statistical Methods I	3
STAT 452	Statistical Methods II	3
Select three of the following:		9
CSCI 444	Data Visualization	
CSCI 447	Machine Learning	
CSCI 448	Pattern Recognition	
CSCI 464	Applications of Mining Big Data	
CSCI 480	Applied Parallel Computing Techniques	
Total Hours		24

Course List

Statistics Machine Learning

CODE	TITLE	HOURS
STAT 341	Introduction to Probability and Statistics	3
STAT 421	Probability Theory	3
Select two of the following:		6
M 325	Discrete Mathematics	
M 362	Linear Optimization	
M 485	Graph Theory	
STAT 422	Mathematical Statistics	
Select three of the following:		9
CSCI 340	Database Design	
CSCI 444	Data Visualization	
CSCI 446	Artificial Intelligence	
CSCI 447	Machine Learning	
CSCI 451	Computational Biology	
Total Hours		21

Course List

Algebra Analysis

CODE	TITLE	HOURS
M 381	Advanced Calculus I	3
M 431	Abstract Algebra I	4
Select two of the following:		7-8
M 326	Number Theory	
M 432	Abstract Algebra II	
M 472	Introduction to Complex Analysis	
M 473	Introduction to Real Analysis	
CSCI 426	Adv Prgrmng Theory/Practice I	3
CSCI 460	Operating Systems	3
CSCI Elective		3
Total Hours		23-24

Course List

Computer Science Minor < University of Montana

Computer Science Minor

Minor - Computer Science

College of Humanities & Sciences

Degree Specific Credits: 18

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: The traditional minor in computer science emphasizes computer programming and related skills.

Summary

CODE	TITLE	HOURS
Computer Science Courses		18
Fundamentals		
Minor Electives		
Total Hours		18

Course List

Computer Science Courses

Rule: Complete the following subcategories. 18 total credits required.

Fundamentals

CODE	TITLE	HOURS
Complete all of the following courses:		
CSCI 135	Fund of Computer Science I	3
CSCI 136	Fund of Computer Science II	3
Total Hours		6

Course List

Minimum Required Grade: C-

Minor Electives

CODE	TITLE	HOURS
Complete 12 credits of the following courses with at least 6 credits at the 300 level or above:		12
CSCI 181	Web Design and Programming	
CSCI 100	Intro to Programming	
CSCI 232	Data Structures and Algorithms	
CSCI 205	Programming with C/C++	
CSCI 361	Computer Architecture	
300-level or above CSCI courses		
Total Hours		12

Course List

Minimum Required Grade: C-

Computer Applications Minor < University of Montana

Computer Applications Minor

Minor - Computer Applications

College of Humanities & Sciences

Degree Specific Credits: 21

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: The minor in Computer Applications emphasizes the use of applications such as programming languages, word processors, spreadsheets, and databases in the management and manipulation of electronic information.

Summary

CODE	TITLE	HOURS
Computer Science Fundamentals		3-6
Computer Science Electives		3-9
Degree Electives		6-15
Total Required Credits		21

Course List

Computer Science Fundamentals

CODE	TITLE	HOURS
Complete one or both of the following courses:		3-6
CSCI 100	Intro to Programming	
CSCI 135	Fund of Computer Science I	
Total Hours		3-6

Course List

Minimum Required Grade: C-

Computer Science Electives

CODE	TITLE	HOURS
Complete 1 to 3 of the following courses:		3-9
CAPP 171	Communicating via Computers	
CSCI 105	Computer Fluency	
CSCI 172	Intro to Computer Modeling	
CSCI 181	Web Design and Programming	
Total Hours		3-9

Course List

Minimum Required Grade: C-

Degree Electives

Rule: Complete remaining degree credits from the following courses for a total of 21 credits.

Note:

- Selection of CSCI 191, CSCI 291, CSCI 391, or CSCI 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.

CODE	TITLE	HOURS
Complete 6-15 credits of the following courses:		6-15
CSCI 135	Fund of Computer Science I (may not be counted toward 2 categories of requirements)	
CSCI 136	Fund of Computer Science II	
CSCI 191	Special Topics (must be pre-approved by the advisor)	
CSCI 205	Programming with C/C++	
CSCI 232	Data Structures and Algorithms	
CSCI 291	Special Topics (must be pre-approved by the advisor)	
CSCI 391	Special Topics (must be pre-approved by the advisor)	
CSCI 444	Data Visualization	
CSCI 491	Special Topics (must be pre-approved by the advisor)	
Total Hours		6-15

Course List

Minimum Required Grade: C-

University Of Montana

Computer Science Teaching Minor

Minor - Computer Science Teaching

College of Humanities & Sciences

Degree Specific Credits: 23

Required Cumulative GPA: 2.75

Catalog Year: 2019-2020

Summary

Course List		
CODE	**TITLE**	**HOURS**
Core Requirements		19
Teaching Licensure Requirement		4
Total Hours		23

Core Requirements

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
CSCI 105	Computer Fluency	3
CSCI 135	Fund of Computer Science I	3
CSCI 136	Fund of Computer Science II	3
CSCI 232	Data Structures and Algorithms	4
CSCI 323	Software Science	3
ITS 150	CCNA 1: Exploration	3
Total Hours		19

Minimum Required Grade: C-

Teaching Licensure Requirements

Note: Individuals completing this minor in Computer Science Teaching must also complete the teaching track of a 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 Teaching and Learning in the College of Education and Human Sciences for more information.

Teaching Methods Course

Note: The EDU 497 course number is used for multiple courses. Students should register for EDU 497 Methods: Teaching and Assessing Computer Science.

Course List		
CODE	**TITLE**	**HOURS**
Complete the following course:		
EDU 497	Teaching and Assessing	4
Total Hours		4

Minimum Required Grade: C-

Secondary Teaching Licensure

Note: For endorsement to teach computer science, a student also must gain admission to the Teacher Education Program and meet all the requirements for secondary teaching licensure. For more information, see the Teaching and Learning Department.

Bioinformatics Certificate < University of Montana

Bioinformatics Certificate

- Overview
- Requirements

The Biological Sciences have become more and more data intensive. Many biological biochemistry experiments, including genomic sequencing, gene expression experiments, Nuclear Magnetic Resonance, Mass Spec, Etc., generate huge quantities of data. This certificate ensures that the student has the computational skills necessary to analyze and manipulates such large quantities of data.

Post-Secondary Certificate - Bioinformatics

College of Humanities & Sciences

Degree Specific Credits: 12

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Summary

CODE	TITLE	HOURS
Required Courses		6
Elective Courses		6
Total Hours		12

Course List

Required Courses

CODE	TITLE	HOURS
Complete all of the following courses:		6
CSCI 135	Fund of Computer Science I	
or BIOB 488	Programming for Biology	
CSCI 451	Computational Biology	
Total Hours		6

Course List

Minimum Required Grade: C-

Elective Courses

Note: BIOB 488 may only fulfill this requirement if not taken as a required course.

CODE	TITLE	HOURS
Complete two of the following courses:		6
BCH 480	Advanced Biochemistry I	
BIOB 486	Genomics	
BIOB 488	Programming for Biology	
CSCI 444	Data Visualization	
CSCI 448	Pattern Recognition	
Total Hours		6

Course List

Minimum Required Grade: C-

Computer Programming Certificate < University of Montana

Computer Programming Certificate

- Overview
- Requirements

Programming is an essential skill for solving problems in many fields. Programming gives maximum flexibility in processing and understanding data, constructing computational models, and building user friendly applications. Programming skills are in high demand in the marketplace. Completing this certificate could be the first step towards a career that involves software development.

Students will apply object-oriented principles to develop software systems. Students will learn to apply and program data structures like lists, trees, and hash tables. The elective course allows the student to learn about software engineering, web programming, mobile device programming, or user interface design.

Post-Secondary Certificate - Computer Programming

College of Humanities & Sciences

Degree Specific Credits: 12

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Summary

CODE	TITLE	HOURS
Required Courses		10
Elective Courses		3-4
Total Required Credits		12

Course List

Required Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
CSCI 135	Fund of Computer Science I	3
CSCI 136	Fund of Computer Science II	3
CSCI 232	Data Structures and Algorithms	4
Total Hours		10

Course List

Minimum Required Grade: C-

Elective Courses

CODE	TITLE	HOURS
Complete one of the following courses:		3-4
CSCI 205	Programming with C/C++	
CSCI 323	Software Science	
CSCI 340	Database Design	
CSCI 411	Advanced Web Programming	
CSCI 412	Game and Mobile App	
CSCI 443	User Interface Design	
Total Hours		3-4

Course List

Minimum Required Grade: C-

East Asian Studies < University of Montana

East Asian Studies

Undergraduate

- East Asian Studies B.A.

East Asian Studies B.A. < University of Montana

East Asian Studies B.A.

Bachelor of Arts - East Asian Studies

College of Humanities & Sciences

Degree Specific Credits: 44

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

CODE	TITLE	HOURS
Lower-Division Core Courses		6
Fundamentals		
Culture and Civilization		
Upper-Division Core Courses		18
Chinese Studies		
Japanese Studies		
East Asian Studies		
Language		20
Chinese Language		
Japanese Language		
Total Hours		44

Course List

Lower-Division Core Courses

Rule: Complete the following subcategories. 6 total credits required.

Fundamentals

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 an advisor.

CODE	TITLE	HOURS
Complete the following course:		
HSTR 240H	East Asian Civilizations	3
Total Hours		3

Course List

Minimum Required Grade: C-

Culture and Civilization

CODE	TITLE	HOURS
Complete one of the following courses:		3
CHIN 211H	Chinese Culture and Civiliz	
JPNS 150H	Japanese Cult & Civiliz	
Total Hours		3

Course List

Minimum Required Grade: C-

Upper-Division Core Courses

Rule: Complete the following subcategories. 18 total credits required.

Chinese Studies

CODE	TITLE	HOURS
Complete 2 courses in Chinese studies. See your advisor for courses that will complete this requirement.		6

Course List

Minimum Required Grade: C-

Japanese Studies

CODE	TITLE	HOURS
Complete 2 courses in Japanese studies. See your advisor for courses that will complete this requirement.		6

Course List

Minimum Required Grade: C-

East Asian Studies

CODE	TITLE	HOURS
Complete 2 courses in Japanese, Chinese, Viet Nam, pan-East Asia, or Buddhism studies. See your advisor for courses that will complete this requirement.		6

Course List

Language

Rule: Complete one of the following subcategories. 20 total credits required.

Chinese Language Option

CODE	TITLE	HOURS
Complete all of the following courses:		
CHIN 101	Elementary Chinese I	5
CHIN 102	Elementary Chinese II	5
CHIN 201	Intermediate Chinese I	5
CHIN 202	Intermediate Chinese II	5
Total Hours		20

Course List

Minimum Required Grade: C-

Japanese Language Option

CODE	TITLE	HOURS
Complete all of the following courses:		
JPNS 101	Elementary Japanese I	5
JPNS 102	Elementary Japanese II	5
JPNS 201	Intermediate Japanese I	5
JPNS 202	Intermediate Japanese II	5
Total Hours		20

Course List

Minimum Required Grade: C-

Economics Department < University of Montana

Economics Department

- Overview
- Programs

Amanda Dawsey, Chair

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).

Undergraduate

- Economics B.A.

Undergraduate Minors

- Economics

Economics B.A. < University of Montana

Economics B.A.

Bachelor of Arts - Economics

College of Humanities & Sciences

Degree Specific Credits: 47-51

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: Refer to graduation requirements listed previously in the catalog. See index.

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

CODE	TITLE	HOURS
Lower-Division Core		6
Upper-Division Core		13
Upper-Division Electives		17
Non-Economics Required Courses		11-15
Teaching Economics Track		
Total Hours		47-51

Course List

Lower-Division Core

CODE	TITLE	HOURS
Complete all of the following courses:		
ECNS 201S	Principles of Microeconomics	3
ECNS 202S	Principles of Macroeconomics	3
Total Hours		6

Course List

Minimum Required Grade: C-

Upper-Division Core

Note: ECNS 398 credits do not count toward the total credits requirement for the major. The upper-division writing requirement must be met by successfully completing ECNS 481.

CODE	TITLE	HOURS
Complete all of the following courses:		
ECNS 301	Intermediate Micro with Calc	3
ECNS 302	Intermediate Macroeconomics	3
ECNS 403	Introduction to Econometrics	4
ECNS 481	Communicating Economics	3
Total Hours		13

Course List

Minimum Required Grade: C-

Upper-Division Electives

Note: ECNS 398 does NOT count toward the total required credits for the major.

CODE	TITLE	HOURS
Complete 17 credits of the following courses:		17
ECNS 310	Intro Health Economics	
ECNS 312	Labor Economics	
ECNS 313	Money and Banking	
ECNS 320	Public Finance	
ECNS 325	Economics of Sports	
ECNS 391	Special Topics	
ECNS 405	Game Theory	
ECNS 406	Industrial Organization	
ECNS 431	International Trade	
ECNS 433	Economics of the Environment	
ECNS 445	Int Env Econ & Clim Change	
ECNS 450	Adv. Topics in Economic Dev.	
ECNS 451	Behavioral and Experimental Economics	
ECNS 491	Special Topics	
ECNS 494	Senior Seminar	
FORS 320	Forest Environmental Economics	
GPHY 323S	Economic Geography of Rural Areas	
NRSM 425	Nat Res & Envir Economics	
PSCI 365	Pub Policy Issues and Analysis	
Total Hours		17

Course List

Minimum Required Grade: C-

Non-Economics Required Courses

Rule: All courses are required.

Note: M 162 must be taken before ECNS 301. STAT 216 must be taken before ECNS 403. Students planning graduate study in economics should take M 171 and M 172 and consider M 221, M 307 and ECNS 511, ECNS 513 and ECNS 560.

CODE	TITLE	HOURS
Complete all of the following courses:		
M 115	Probability and Linear Mathematics	3
M 171 & M 172	Calculus I and Calculus II	4-8
or M 162	Applied Calculus	
STAT 216	Introduction to Statistics (or equivalent)	4
Total Hours		11-15

Course List

Minimum Required Grade: C-

Teaching Economics Track

Notes:

- This teaching track contains different/additional course requirements designed to meet state standards. Those interested in teaching in K-12 schools must complete the teaching track of a major in a teaching content area plus the Teacher Education Program through the Department of Teaching and Learning. Additional teaching areas can be added through completion of the teaching track of a major or minor in that content area.
  - Secondary Education Licensure Program
  - Licensure Degree Requirements
- To complete this teaching track, you need to contact the Teaching and Learning Department. You do not fill out a major/minor form for graduation or the major/minor/concentration section of the major change form. Approvals for this track must come from the Teaching and Learning 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.
- This major does not qualify as a single field endorsement. Individuals must complete the teaching track in a second major or minor in another content area.

Note: The EDU 497 course number is used for multiple courses. Students should register for EDU 497 Methods: 5-12 Social Studies.

CODE	TITLE	HOURS
Complete the following course:		
EDU 497	Teaching and Assessing	4
Total Hours		4

Course List

Minimum Required Grade: C-

Secondary Teaching Licensure

Note: For endorsement to teach economics, a student also must gain admission to the Teacher Education Program and meet all the requirements for secondary teaching licensure. For more information, see the Teaching and Learning Department.

Economics Minor < University of Montana

Economics Minor

Minor - Economics

College of Humanities & Sciences

Degree Specific Credits: 25

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Summary

CODE	TITLE	HOURS
Lower-Division Core		6
Upper-Division Core		6
Upper-Division Electives		6
Non-Economics Required Courses		7
Teaching Economics Track		
Total Hours		25

Course List

Lower-Division Core

CODE	TITLE	HOURS
Complete all of the following courses:		
ECNS 201S	Principles of Microeconomics	3
ECNS 202S	Principles of Macroeconomics	3
Total Hours		6

Course List

Minimum Required Grade: C-

Upper-Division Core

Note: M 115 and M 162 should be taken before enrolling in ECNS 301.

CODE	TITLE	HOURS
Complete all of the following courses:		
ECNS 301	Intermediate Micro with Calc	3
ECNS 302	Intermediate Macroeconomics	3
Total Hours		6

Course List

Minimum Required Grade: C-

Upper-Division Electives

Note: Students are required to complete STAT 216 (or equivalent) with a C- or better before enrolling in ECNS 403.

CODE	TITLE	HOURS
Complete 6 credits of the following courses:		6
ECNS 310	Intro Health Economics	
ECNS 312	Labor Economics	
ECNS 313	Money and Banking	
ECNS 320	Public Finance	
ECNS 325	Economics of Sports	
ECNS 391	Special Topics	
ECNS 403	Introduction to Econometrics	
ECNS 405	Game Theory	
ECNS 406	Industrial Organization	
ECNS 431	International Trade	
ECNS 433	Economics of the Environment	
ECNS 445	Int Env Econ & Clim Change	
ECNS 450	Adv. Topics in Economic Dev.	
ECNS 451	Behavioral and Experimental Economics	
ECNS 491	Special Topics	
Total Hours		6

Course List

Minimum Required Grade: C-

Non-Economics Required Courses

Note: M 115 (or equivalent) and M 162 should be taken before enrolling in ECNS 301.

CODE	TITLE	HOURS
Complete all of the following courses:		
M 115	Probability and Linear Mathematics	3
M 162	Applied Calculus	4
Total Hours		7

Course List

Minimum Required Grade: C-

Teaching Economics Track

Notes:

- This teaching track contains different/additional course requirements designed to meet state standards. Those interested in teaching in K-12 schools must complete the teaching track of a major in a teaching content area plus the Teacher Education Program through the Department of Teaching and Learning. Additional teaching areas can be added through completion of the teaching track of a major or minor in that content area.
  - Secondary Education Licensure Program
  - Licensure Degree Requirements
- To complete this teaching track, you need to contact the Teaching and Learning Department. You do not fill out a major/minor form for graduation or the major/minor/concentration section of the major change form. Approvals for this track must come from the Teaching and Learning Department.
- Tracks will not appear on your UM transcript, diploma, university lists, student data system, or university publications. They are used for advising purposes only. You do not fill out a major change for a track.
- Individuals completing the teaching track of this minor must also complete the teaching track of a major in another teaching content area.

Teaching Economics Track Required Course

Note: The EDU 497 course number is used for multiple courses. Students should register for EDU 497 Methods: 5-12 Social Studies.

CODE	TITLE	HOURS
Complete the following course:		
EDU 497	Teaching and Assessing	4
Total Hours		4

Course List

Minimum Required Grade: C-

Secondary Teaching Licensure

Note: For endorsement to teach economics, a student also must gain admission to the Teacher Education Program and meet all the requirements for secondary teaching licensure. For more information, see the Teaching and Learning Department.

English Department

Bob Baker, 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. Two recent Pulitzer Price Winners - William Finnegan and Andrew Sean Greer - received their M.F.A.'s from the department. Now, more than a century old, this department offers the following degrees:

B.A. with concentrations in

- Literature
- Creative Writing
- English Teaching
- Linguistics
- Literature and the Environment

Graduate degrees in

- Creative Writing (M.F.A.)
- Literature (M.A.)
- Teaching (M.A.)

Minors in

- English
- Irish Studies
- Film Studies

Our Composition program serves the entire University by offering the first-year composition requirement WRIT 101, as well as courses in advanced composition and graduate seminars in the teaching of writing.

Undergraduate

- English B.A., Creative Writing Concentration
- English B.A., English Teaching Concentration
- English B.A., Linguistics Concentration
- English B.A., Literature Concentration
- English B.A., Literature and the Environment Concentration

Undergraduate Minors

- English
- Irish Studies

English B.A. - Creative Writing < University of Montana

English B.A. - Creative Writing

- Overview
- Requirements

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 concentration 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 Concentration

College of Humanities & Sciences

Degree Specific Credits: 43-57

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

CODE	TITLE	HOURS
Foundational Courses		21
Upper-Division Creative Writing Courses		12
Upper-Division English Electives		6
Modern or Classical Language major requirement		4-18
Total Hours		43-57

Course List

Foundation Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
LIT 110L	Intro to Lit	3
LIT 236L	Literary Histories	3
LIT 246L	Genres, Themes, Approaches	3
LIT 300	Literary Criticism	3
LIT 327	Shakespeare	3
Complete two of the following courses:		6
CRWR 210A	Intro Fiction Workshop	
CRWR 211A	Intro Poetry Workshop	
CRWR 212A	Intro Nonfiction Workshop	
Note: The Creative Writing faculty recommend students take more than one 200-level CRWR workshop to fulfill this requirement; however, students may substitute one of the following courses in lieu of a workshop. Other courses may be substituted at the discretion of the student s advisor.		
CRWR 115L	Montana Writers Live	
CRWR 234	The Oval: Literary Mag	
CRWR 310	Intermediate Fiction Workshop (This is in addition to the 300-level workshop requirement.)	
or CRWR 311	Intermediate Poetry Workshop	
or CRWR 312A	Intermediate Nonfiction Workshop	
CRWR 391	Special Topics	
or CRWR 491	Special Topics	
CRWR 392	Independent Study	
or CRWR 492	Independent Study	
Total Hours		21

Course List

Minimum Required Grade: C

Upper-Division Creative Writing Courses

Rule: Complete all categories.

CODE	TITLE	HOURS
Complete two of the following courses:		6
CRWR 310	Intermediate Fiction Workshop	
CRWR 311	Intermediate Poetry Workshop	
CRWR 312A	Intermediate Nonfiction Workshop	
Optional: ONE of these courses may be substituted for an intermediate workshop:		3
CRWR 320	The Art and Craft of Revision	
CRWR 322	Techniques of Modern Essay	
CRWR 391	Special Topics	
CRWR 425	Storytelling	
CRWR 491	Special Topics	
CRWR 410, 411, 412 may also substitute if not being used to fulfill the 400-level workshop requirement		
Complete one of the following courses:		3
CRWR 410	Advanced Fiction Workshop	
CRWR 411	Advanced Poetry Workshop	
CRWR 412	Advanced Nonfiction Workshop	
Total Hours		12

Course List

Minimum Required Grade: C

Upper-Division English Electives

CODE	TITLE	HOURS
Complete two courses (6 credits) at the 300- or 400-level from offerings in LIT, IRSH, FILM, non-workshop CRWR courses or MCLL literature.		6

Course List

Minimum Required Grade: C-

Modern & Classical Language Requirement

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).

CODE	TITLE	HOURS
Complete the 202-level proficiency in either a modern or classical language other than English.		4-18

Course List

Minimum Required Grade: C-

English B.A. - Linguistics < University of Montana

English B.A. - Linguistics

- Overview
- Requirements

In conjunction with the Linguistics Program, English also offers a concentration in English Linguistics which provides a background in both literature and language. Students studying linguistics learn about the structure, history, and cultural influences in oral and written English language.

Bachelor of Arts - English; Linguistics Concentration

College of Humanities & Sciences

Degree Specific Credits: 40-54

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

CODE	TITLE	HOURS
English Core Courses		18
Upper-Division Requirements		18
Modern & Classical Language Requirement		4-18
Total Hours		40-54

Course List

English Core Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
LIT 110L	Intro to Lit	3
LIT 327	Shakespeare	3
Complete 2 of the following courses:		6
LIT 202L	The Environmental Imagination	
LIT 236L	Literary Histories	
LIT 246L	Genres, Themes, Approaches	
Complete 2 of the following courses:		6
LIT 349L	Medieval Lit	
LIT 350L	Chaucer	
LIT 353L	Milton	
WGSS 491	Special Topics (Medieval Women Authors)	
Total Hours		18

Course List

Minimum Required Grade: C

Upper-Division Requirements

CODE	TITLE	HOURS
Complete all of the following courses:		
LING 465	Structure & History of English	3
LING 470	Linguistic Analysis	3
Complete 2 of the following courses:		6
LING 471	Phonetics and Phonology	
LING 472	Syntax	
LING 489	Morphology	
Complete 2 of the following courses:		6
LING 375X	Linguistic Ecology and Language Endangerment	
LING 473	Language and Culture	
LING 474	Historical Linguistics	
LING 475	Linguistic Field Methods	
LING 477	Bilingualism	
LING 478	Learner Language	
LING 484	NA Indigenous Lang & Ling	
Total Hours		18

Course List

Minimum Required Grade: C-

Modern & Classical Language Requirement

Note: All English majors who select the Linguistics concentration must complete four semesters of the same modern or classical language through the 202-level or demonstrate equivalent competency on a Foreign Language Placement Exam.

CODE	TITLE	HOURS
Complete the 202-level proficiency in either a modern or classical language other than English.		4-18

Course List

Minimum Required Grade: C-

English B.A. - Literature

Under the Literature concentration, students ground their study of literature in a series of introductory courses in major themes and historical approaches, intermediate courses in Shakespeare and literary theory, and a senior seminar that requires the development of a research project. Students complement these core courses with a selection of electives that engage specific genres, authors, and periods, as well as different disciplines and literatures of diversity (e.g. Native American Literature). M.A. students select graduate seminars in American, British, and world literatures as well as other disciplines, their course work culminating in either a traditional thesis or a portfolio of seminar papers revised in collaboration with a committee. The Literature concentration 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 an important part of a student s experience.

Bachelor of Arts - English; Literature Concentration

College of Humanities & Sciences

Degree Specific Credits: 40-54

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: English majors with the concentration in Literature must earn 36 of their total credits in Department of English courses.

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

Course List		
CODE	**TITLE**	**HOURS**
English Core Courses		15
Upper-Division Core Courses		12
Upper-Division English Electives		6
Literature Seminar Capstone		3
Modern or Classical Languages Requirement		4-18
Total Hours		40-54

English Core Courses

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
LIT 110L	Intro to Lit	3
LIT 300	Literary Criticism	3
LIT 327	Shakespeare	3
Complete 2 of the following courses (note: you may take two sections of LIT 236L or LIT 246L if the course subtitles and content are different):		6
LIT 202L	The Environmental Imagination	
LIT 236L	Literary Histories	
LIT 246L	Genres, Themes, Approaches	
Total Hours		15

Minimum Required Grade: C

Upper-Division Core Courses

Course List		
CODE	**TITLE**	**HOURS**
Complete 4 of the following courses, with at least one being a 400-level course:		12
LIT 301	Studies in Literary Forms	
LIT 304	U.S. Writers of Color	
LIT 305	Lit by & About Native Amer	
LIT 314	The American Novel	
LIT 315	Voices of the Am Renaissance	
LIT 331	Major Author/s	
LIT 342	Montana Writers	
LIT 343	African American Lit	
LIT 344	Asian American Literature	
LIT 349L	Medieval Lit	
LIT 350L	Chaucer	
LIT 353L	Milton	
LIT 355	British Romanticism	
LIT 363	Modern Poetry	
LIT 369	Short Fiction	
LIT 370	Science Fiction	
LIT 373	Lit & Environment	
LIT 376	Lit & Other Disciplines	
LIT 378L	Gay and Lesbian Studies	
LIT 380	Literary Approaches to Drama	
LIT 391	Special Topics	
LIT 402	Literature in Place	
LIT 420	Critical Theory	
LIT 421	History of Criticism & Theory	
LIT 422	Ecocritical Theory & Practice	
LIT 430	Studies in Comparative Lit	
LIT 491	Special Topics	
Total Hours		12

Minimum Required Grade: C

Upper-Division English Electives

Course List		
CODE	**TITLE**	**HOURS**
Complete any two upper-division courses from course prefixes: CRWR, IRSH, FILM, LING, LIT, or WRIT. All courses must be 300- or 400-level.		6
Total Hours		6

Minimum Required Grade: C-

Literature Seminar Capstone

Course List		
CODE	**TITLE**	**HOURS**
Complete the following course:		
LIT 494	Seminar: Lit Capstone	3
Total Hours		3

Minimum Required Grade: C-

Modern & Classical Language Requirement

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).

Course List		
CODE	**TITLE**	**HOURS**
Complete the 202-level proficiency in either a modern or classical language other than English.		4-18

Minimum Required Grade: C-

English B.A. - Literature and the Environment < University of Montana

English B.A. - Literature and the Environment

Bachelor of Arts - English; Literature & The Environment Concentration

College of Humanities & Sciences

Degree Specific Credits: 40-54

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

CODE	TITLE	HOURS
English Core Courses		24
Upper-Division English Elective Courses		6
Senior Seminar		3
Modern & Classical Language Requirement		4-18
Approved Complementary Course		3
Total Hours		40-54

Course List

English Core Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
LIT 110L	Intro to Lit	3
LIT 202L	The Environmental Imagination	3
LIT 236L	Literary Histories	3
or LIT 246L	Genres, Themes, Approaches	
LIT 300	Literary Criticism	3
LIT 327	Shakespeare	3
LIT 373	Lit & Environment	3
LIT 402	Literature in Place	3
LIT 422	Ecocritical Theory & Practice	3
Total Hours		24

Course List

Minimum Required Grade: C-

Upper-Division English Elective Courses

CODE	TITLE	HOURS
Complete two of the following courses:		6
LIT 301	Studies in Literary Forms	
LIT 304	U.S. Writers of Color	
LIT 305	Lit by & About Native Amer	
LIT 314	The American Novel	
LIT 315	Voices of the Am Renaissance	
LIT 331	Major Author/s	
LIT 342	Montana Writers	
LIT 343	African American Lit	
LIT 344	Asian American Literature	
LIT 349L	Medieval Lit	
LIT 350L	Chaucer	
LIT 353L	Milton	
LIT 355	British Romanticism	
LIT 363	Modern Poetry	
LIT 369	Short Fiction	
LIT 370	Science Fiction	
LIT 373	Lit & Environment	
LIT 376	Lit & Other Disciplines	
LIT 378L	Gay and Lesbian Studies	
LIT 380	Literary Approaches to Drama	
LIT 391	Special Topics	
LIT 402	Literature in Place	
LIT 420	Critical Theory	
LIT 421	History of Criticism & Theory	
LIT 422	Ecocritical Theory & Practice	
LIT 430	Studies in Comparative Lit	
LIT 491	Special Topics	
Total Hours		6

Course List

Minimum Required Grade: C-

Senior Seminar

CODE	TITLE	HOURS
Complete the following course:		
LIT 494	Seminar: Lit Capstone	3
Total Hours		3

Course List

Minimum Required Grade: C-

Modern & Classical Language Requirement

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).

CODE	TITLE	HOURS
Complete the 202-level proficiency in either a modern or classical language other than English.		4-18

Course List

Minimum Required Grade: C-

Approved Complementary Course

CODE	TITLE	HOURS
Complete an approved complementary course from a discipline other than English. See your advisor for a list of courses that fulfill this requirement.		3

Course List

Minimum Required Grade: C-

English B.A. - Teaching English < University of Montana

English B.A. - Teaching English

- Overview
- 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. The program creates learning communities and supports teachers as critical thinkers, creative problem solvers, and reflective practitioners. Students who successfully complete this concentration and the requirements from the College of Education receive both a B.A. in English 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. 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. Graduates of the program have become Montana Teachers of the Year and National Board of Certified Teachers.

Individuals interested in teaching in K-12 schools must complete a degree in the content area they want to teach plus the Teacher Education Program through the Department of Teaching and Learning. Individuals must complete the teaching track within that degree program, which may contain different course requirements than the non-teaching track 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; Teaching English Concentration

College of Humanities & Sciences

Degree Specific Credits: 46-50

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

CODE	TITLE	HOURS
English Core Courses		15
Upper-Division Literature Courses		6
English Teaching Courses		15
English Electives		6
Modern & Classical Language Requirement		4-8
Total Hours		46-50

Course List

English Core Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
LIT 110L	Intro to Lit	3
or CRWR 211A	Intro Poetry Workshop	
LIT 300	Literary Criticism	3
LIT 327	Shakespeare	3
Complete two of the following courses:		6
LIT 202L	The Environmental Imagination	
LIT 236L	Literary Histories	
LIT 246L	Genres, Themes, Approaches	
Total Hours		15

Course List

Minimum Required Grade: C

Upper-Division Literature Courses

CODE	TITLE	HOURS
Complete two of the following courses:		6
LIT 301	Studies in Literary Forms	
LIT 304	U.S. Writers of Color	
LIT 305	Lit by & About Native Amer	
LIT 314	The American Novel	
LIT 315	Voices of the Am Renaissance	
LIT 331	Major Author/s	
LIT 342	Montana Writers	
LIT 343	African American Lit	
LIT 344	Asian American Literature	
LIT 349L	Medieval Lit	
LIT 350L	Chaucer	
LIT 353L	Milton	
LIT 355	British Romanticism	
LIT 363	Modern Poetry	
LIT 369	Short Fiction	
LIT 370	Science Fiction	
LIT 373	Lit & Environment	
LIT 376	Lit & Other Disciplines	
LIT 378L	Gay and Lesbian Studies	
LIT 380	Literary Approaches to Drama	
LIT 391	Special Topics	
LIT 402	Literature in Place	
LIT 420	Critical Theory	
LIT 421	History of Criticism & Theory	
LIT 422	Ecocritical Theory & Practice	
LIT 430	Studies in Comparative Lit	
LIT 491	Special Topics	
Total Hours		6

Course List

Minimum Required Grade: C-

English Teaching Courses

Note: Students must be admitted to the Teacher Education program prior to enrolling in ENT 440, ENT 441, and ENT 442. Other EDU pre-/co-requisites also apply to ENT 440, ENT 441, and ENT 442.

CODE	TITLE	HOURS
Complete all of the following courses:		
ENT 439	Studies in Young Adult Lit	3
ENT 440	Teaching Writing	3
ENT 441	Tchg Rdng & Literature	3
ENT 442	Tchg Oral Lang & Media Lit	3
Complete one of the following courses:		3
LING 270S	Intro to Linguistics	
LING 465	Structure & History of English	
LING 470	Linguistic Analysis	
Total Hours		15

Course List

Minimum Required Grade: C-

English Electives

CODE	TITLE	HOURS
Complete two courses (6 credits) in ENT, LIT, CRWR, FILM, IRSH, or WRIT (above WRIT 101 College Writing I).		6

Course List

Minimum Required Grade: C-

Modern & Classical Language Requirement

Note: Students need to take one year (two semesters) of a modern or classical language or exemplify proficiency through examination (available through the Modern and Classical Languages and Literature Department).

CODE	TITLE	HOURS
Complete the first year-level proficiency in either a modern or classical language other than English.		4-8

Course List

Minimum Required Grade: C-

Secondary Teaching Licensure

Note: For endorsement to teach English, a student also must gain admission to the Teacher Education Program and meet all the requirements for secondary teaching licensure. For more information, see the Teaching and Learning Department.

English Minor

Minor in English

College of Humanities & Sciences

Degree Specific Credits: Standard Track: 18; Teaching English Track: 40-48

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: English minors must earn at least 18 credits within the English Department (excluding WRIT courses).

Summary

Course List		
CODE	**TITLE**	**HOURS**
English Minor - Standard Track		18
Foundational Courses		
Focus Courses		
English Minor - Teaching English Track		40-48
Teaching English Track Core Courses		
Teaching English Track Upper-Division Literature Courses		
Teaching English Track English Teaching Courses		
Teaching English Track Modern & Classical Language Requirement		

English Minor - Standard Track

Note: 18 total credits required.

Foundational Courses

Course List		
CODE	**TITLE**	**HOURS**
Complete any two 200-level courses with LIT or CRWR prefixes.		6

Minimum Required Grade: C-

Focus Courses

Note: Some of these upper-division courses carry prerequisites, so students should select lower- and upper-division courses carefully to ensure those prerequisites are met. Students wishing to enroll in 300- or 400-level CRWR workshops (CRWR 310/CRWR 311/CRWR 312A/CRWR 410/CRWR 411/CRWR 412) must complete the 200-level CRWR pre-requisite.CRWR 410/CRWR 411/CRWR 412also require a writing submission for consent of instructor. Students wishing to enroll in upper-division LIT courses need to take 6 credits of LIT at the 200-level, LIT 300, and/or receive consent of instructor.

		Course List
CODE	**TITLE**	**HOURS**
Complete any four upper-division English elective courses with the prefixes LIT, IRSH, FILM, or CRWR.		12

Minimum Required Grade: C-

English Minor - Teaching English Track

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 a secondary teaching license (grades 5-12) in English. 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.

Notes:

- This teaching track contains different/additional course requirements designed to meet state standards. Those interested in teaching in K-12 schools must complete the teaching track of a major in a teaching content area plus the Teacher Education Program through the Department of Teaching and Learning. Additional teaching areas can be added through completion of the teaching track of a major or minor in that content area.
  - Secondary Education Licensure Program
  - Licensure Degree Requirements
- To complete this teaching track, you need to contact the Teaching and Learning Department. You do not fill out a major/minor form for graduation or the major/minor/concentration section of the major change form. Approvals for this track must come from the Teaching and Learning Department.
- Tracks will not appear on your UM transcript, diploma, university lists, student data system, or university publications. They are used for advising purposes only. You do not fill out a major change for a track.
- Individuals completing the teaching track of this minor must also complete the teaching track of a major in another content area.
- To complete the English Teaching Track, a student must earn 36 credits within the English Department.

Teaching English Track Core Courses

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
LIT 110L	Intro to Lit	3
or CRWR 211A	Intro Poetry Workshop	
LIT 300	Literary Criticism	3
LIT 327	Shakespeare	3
Complete two of the following courses:		6
LIT 202L	The Environmental Imagination	
LIT 236L	Literary Histories	
LIT 246L	Genres, Themes, Approaches	
Total Hours		15

Minimum Required Grade: C

Teaching English Track Upper-Division Literature Courses

Course List		
CODE	**TITLE**	**HOURS**
Complete two of the following courses:		6
LIT 301	Studies in Literary Forms	
LIT 304	U.S. Writers of Color	
LIT 305	Lit by & About Native Amer	
LIT 314	The American Novel	
LIT 315	Voices of the Am Renaissance	
LIT 331	Major Author/s	
LIT 342	Montana Writers	
LIT 343	African American Lit	
LIT 344	Asian American Literature	
LIT 349L	Medieval Lit	
LIT 350L	Chaucer	
LIT 353L	Milton	
LIT 355	British Romanticism	
LIT 363	Modern Poetry	
LIT 369	Short Fiction	
LIT 370	Science Fiction	
LIT 373	Lit & Environment	
LIT 376	Lit & Other Disciplines	
LIT 378L	Gay and Lesbian Studies	
LIT 380	Literary Approaches to Drama	
LIT 391	Special Topics	
LIT 402	Literature in Place	
LIT 420	Critical Theory	
LIT 421	History of Criticism & Theory	
LIT 422	Ecocritical Theory & Practice	
LIT 430	Studies in Comparative Lit	
LIT 491	Special Topics	
Total Hours		6

Minimum Required Grade: C-

Teaching English Track English Teaching Courses

Note: Students must be admitted to the Teacher Education program prior to enrolling in ENT 440ENT 440, ENT 441ENT 441, and ENT 442ENT 442. Other EDU pre-/co-requisites also apply to ENT 440ENT 440, ENT 441ENT 441, and ENT 442ENT 442.

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
ENT 439	Studies in Young Adult Lit	3
ENT 440	Teaching Writing	3
ENT 441	Tchg Rdng & Literature	3
ENT 442	Tchg Oral Lang & Media Lit	3
Complete one of the following courses:		3
LING 270S	Intro to Linguistics	
LING 465	Structure & History of English	
LING 470	Linguistic Analysis	
Total Hours		15

Minimum Required Grade: C-

Teaching English Track Modern & Classical Language Requirement

Note: Students need to take one year (two semesters) of a modern or classical language or exemplify proficiency through examination (available through the Modern and Classical Languages and Literature Department).

Course List		
CODE	**TITLE**	**HOURS**
Complete the first year-level proficiency in either a modern or classical language other than English.		4-8

Minimum Required Grade: C-

Secondary Teaching Licensure

Note: For endorsement to teach English, a student also must gain admission to the Teacher Education Program and meet all the requirements for secondary teaching licensure. For more information, see the Teaching and Learning Department.

Film Studies Minor < University of Montana

Film Studies Minor

- Overview
- Requirements

Students choosing the English/Film Studies concentration 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 film 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.

Minor - Film Studies

College of Humanities & Sciences

Degree Specific Credits: 18

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Summary

CODE	TITLE	HOURS
Foundational Courses		3
Focus Courses		6
Film Electives		9
Total Hours		18

Course List

Foundational Courses

CODE	TITLE	HOURS
Complete the following course:		
FILM 103L	Introduction to Film	3
Total Hours		3

Course List

Minimum Required Grade: C-

Focus Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
FILM 300	History of Film	3
FILM 447	Film Theory	3
Total Hours		6

Course List

Minimum Required Grade: C-

Film Electives

Note: Special topics courses (FILM 191, FILM 291, FILM 391, FILM 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 327, FILM 381, FILM 481, FILM 484), and FILM 492 have a repeatability of 9 credits.

PHL 427 can count toward the Film Studies minor when the topic specifically includes film.

CODE	TITLE	HOURS
Complete 9 credits of the following courses:		9
ENT 442	Tchg Oral Lang & Media Lit	
FILM 191	Special Topics	
FILM 291	Special Topics	
FILM 308	Russian Cinema and Culture	
FILM 320	Shakespeare and Film	
FILM 327	Film Genres	
FILM 363	The French Cinema	
FILM 365	Latin Amer Civ Thru Lit & Film	
FILM 381	Studies in the Film	
FILM 391	Special Topics	
FILM 448	Documentary: Thry and Practice	
FILM 481	Advanced Studies in Film	
FILM 484	Film Directors	
FILM 491	Special Topics	
FILM 492	Independent Study	
FILM 495	Practicum	
MART 101L	Intro to Media Arts	
MCLG 339	Surv African Cinema	
NASX 360	Native Amer and Cinema	
PHL 102Y	Topical Intro to Philosophy	
PHL 427	Topics in Philosophy of Art	
Total Hours		9

Course List

Minimum Required Grade: C-

Irish Studies Minor < University of Montana

Irish Studies Minor

- Overview
- Requirements

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.

Minor - Irish Studies

College of Humanities & Sciences

Degree Specific Credits: 20

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: Irish Studies students must earn at least 18 credits. These credits will include both the required coursework and electives.

Summary

CODE	TITLE	HOURS
Foundational Courses		11
Irish Literature Course		3
Minor Electives		6
Total Hours		20

Course List

Foundational Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
IRSH 101	Elementary Irish	4
IRSH 102	Elementary Irish II	4
Complete one of the following courses:		3
IRSH 249	The Irish	
IRSH 345L	Literature in the Irish Lang	
IRSH 360	Irish/N Irish Literature	
Total Hours		11

Course List

Minimum Required Grade: C-

Irish Literature Course

Note: LIT 331 can count for the Irish Studies minor when the course focuses on an Irish author (e.g. James Joyce).

CODE	TITLE	HOURS
Complete 3 credits from the following courses:		3
IRSH 345L	Literature in the Irish Lang	
IRSH 360	Irish/N Irish Literature	
IRSH 380	Topics in Irish Studies	
IRSH 491	Special Topics	
LIT 331	Major Author/s	
Total Hours		3

Course List

Minimum Required Grade: C-

Minor Electives

Notes:

- Irish Theater is offered intermittently through the College of Visual and Performing Arts as THTR 391.
- Students who wish to continue with Irish language through the 202 level may do so, but only Irish language IRSH 103 and IRSH 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.

CODE	TITLE	HOURS
Complete 6 credits from the following courses:		6
DANC 160A	Dance Forms: Irish	
IRSH 103	Elementary Irish III	
IRSH 201	Intermediate Irish I	
IRSH 380	Topics in Irish Studies	
IRSH 391	Special topics	
IRSH 492	Independent Study	
LIT 376	Lit & Other Disciplines	
LIT 391	Special Topics	
THTR 391	Special Topics/Exprmtl Courses	
Total Hours		6

Course List

Minimum Required Grade: C-

Environmental Studies

Dan Spencer, 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.

Undergraduate

- Environmental Studies B.A.

Undergraduate Minors

- Environmental Studies

Undergraduate Certificates

- Certificate in Community Agriculture

Environmental Studies B.A. < University of Montana

Environmental Studies B.A.

Bachelor of Arts - Environmental Studies

College of Humanities & Sciences

Degree Specific Credits: 52

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

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 Environmental Studies advisor to select or design an Environmental Studies focus area.

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

CODE	TITLE	HOURS
Lower-Division Core Courses		25
Environmental Science and Environmental Studies		
Chemistry		
Math		
Biology		
Quantitative Skills - Statistics		
Upper-Division Core Courses		12
Natural Science - Ecology		
Policy		
Humanities		
Social Science		
Approved Community Service/Internship Experience		
Elective Environmental Studies Courses		9
Additional Requirements		6
Native American Studies		
Additional Science Course		
Total Hours		52

Course List

Lower-Division Core Courses

Rule: Complete the following subcategories of courses. 24 total credits required.

Environmental Science and Environmental Studies

CODE	TITLE	HOURS
Complete all of the following courses:		
ENSC 105N	Environmental Science	3
ENST 201	Environmental Info Resources	3
ENST 225S	Sustainable Communities	3
ENST 230H	Nature and Society	3
Total Hours		12

Course List

Minimum Required Grade: C-

Chemistry

CODE	TITLE	HOURS
Complete the following course:		
CHMY 121N	Introduction to General Chemistry	4
Total Hours		4

Course List

Minimum Required Grade: C-

Math

CODE	TITLE	HOURS
Complete the following course:		
M 115	Probability and Linear Mathematics	3
Total Hours		3

Course List

Minimum Required Grade: C-

Biology

CODE	TITLE	HOURS
Complete one of the following courses:		3
BIOB 101N	Discover Biology	
BIOB 160N	Principles of Living Systems	
BIOB 170N	Princpls Biological Diversity	
Total Hours		3

Course List

Minimum Required Grade: C-

Quantitative Skills - Statistics

CODE	TITLE	HOURS
Complete one of the following courses:		3
FORS 201	Forest Biometrics	
PSYX 222	Psychological Statistics	
SOCI 202	Social Statistics	
STAT 216	Introduction to Statistics	
Total Hours		3

Course List

Minimum Required Grade: C-

Upper-Division Core Courses

Rule: Complete the following subcategories of courses. 15 total credits required.

Natural Science - Ecology

CODE	TITLE	HOURS
Complete one of the following courses:		3
BIOE 370	General Ecology	
ENSC 360	Applied Ecology	
FORS 330	Forest Ecology	
Total Hours		3

Course List

Minimum Required Grade: C-

Policy

CODE	TITLE	HOURS
Complete one of the following courses:		3
ENST 367	Environmental Politics & Policies	
ENST 382	Environmental Law	
Total Hours		3

Course List

Minimum Required Grade: C-

Humanities

CODE	TITLE	HOURS
Complete one of the following courses:		3
ENST 335L	The Environmental Vision	
ENST 410	TEK of Native Peoples	
ENST 430	Culture & Agriculture	
Total Hours		3

Course List

Minimum Required Grade: C-

Social Science

CODE	TITLE	HOURS
Complete one of the following courses:		3
ENST 310	Environment Montana: A to Z	
ENST 487	Globalization, Justice & Environment	
ENST 489S	Environmental Justice Issues & Solutions	
Total Hours		3

Course List

Minimum Required Grade: C-

Approved Community Service/Internship Experience

CODE	TITLE	HOURS
Complete 3 credits of the following courses:		3
ENSC 398	Cooperative Education/Intern	
ENST 396	Supervised Internship (PEAS)	
ENST 398	Cooperative Education/Intern	
Total Hours		3

Course List

Minimum Required Grade: C-

Elective Environmental Studies Courses

CODE	TITLE	HOURS
Complete 9 credits of the following courses:		9
COMX 347	Rhetoric, Nature, and Environmentalism	
COMX 349	Communication, Consumption, and Climate	
ECNS 433	Economics of the Environment	
ECNS 445	Int Env Econ & Clim Change	
ENSC 391	Special Topics/Experimental Courses	
ENSC 491	Special Topics/Experimental Courses	
ENSC 492	Independent Study	
ENSC 494	Seminar/Workshop	
ENSC 495	Field Study	
ENST 320E	Earth Ethics	
ENST 373A	Nature Works	
ENST 391	Special Topics/Experimental Courses	
ENST 395	Field Studies: Env. Studies	
ENST 396	Supervised Internship (PEAS)	
ENST 420	US Environmental Movement	
ENST 427	Social Issues:The Mekong Delta	
ENST 437	Climate Change: Mekong Delta	
ENST 472	Gen Sci: Conservation Education	
ENST 476	Environmental Citizenship	
ENST 480	Food Justice and Sustainability	
ENST 491	Special Topics/Experimental Courses	
ENST 492	Independent Study	
ENST 493	Study Abroad: Environmental Justice Latin America	
ENST 494	Seminar/Workshop	
ENST 499	Senior Thesis/Capstone	
GPHY 421	Sustainable Cities	
PHL 323	Ethics of Climate Change	
Total Hours		9

Course List

Minimum Required Grade: C-

Additional Requirements

Rule: Complete the following subcategories of courses. 6 total credits required.

Native American Studies

CODE	TITLE	HOURS
Complete one of the following courses:		3
ENST 410	TEK of Native Peoples	
NASX 303E	Ecological Perspectives in Native American Traditions	
NASX 304E	Native American Beliefs/Philos	
Total Hours		3

Course List

Minimum Required Grade: C-

Additional Science Course

Note: BIOB 170N may only be used to satisfy this requirement if not used to satisfy the introductory Biology requirement.

CODE	TITLE	HOURS
Complete one of the following courses:		3
BIOB 170N	Princpls Biological Diversity	
BIOO 335	Rocky Mountain Flora	
CCS 103X	Intro Climate Change:Sci & Soc	
ERTH 303N	Weather and Climate	
NRSM 210N	Soils, Water and Climate	
NRSM 265	Elements of Ecological Restoration	
NRSM 385	Watershed Hydrology	
Total Hours		3

Course List

Minimum Required Grade: C-

Environmental Studies Minor < University of Montana

Environmental Studies Minor

Minor - Environmental Studies

College of Humanities & Sciences

Degree Specific Credits: 25

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Summary

CODE	TITLE	HOURS
Lower-Division Core Courses		9
Upper-Division Electives		16
Environmental Studies		
Ecology		
Total Hours		25

Course List

Lower-Division Core Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
ENSC 105N	Environmental Science	3
ENST 225S	Sustainable Communities	3
ENST 230H	Nature and Society	3
Total Hours		9

Course List

Minimum Required Grade: C-

Upper-Division Electives

Rule: Complete the following subcategories of courses. 16 total credits required.

Environmental Studies

CODE	TITLE	HOURS
Complete 13 credits of the following courses:		13
COMX 347	Rhetoric, Nature, and Environmentalism	

CODE	TITLE	HOURS
COMX 349	Communication, Consumption, and Climate	
ECNS 433	Economics of the Environment	
ECNS 445	Int Env Econ & Clim Change	
ENSC 398	Cooperative Education/Intern	
ENSC 491	Special Topics/Experimental Courses	
ENSC 492	Independent Study	
ENSC 495	Field Study	
ENST 310	Environment Montana: A to Z	
ENST 320E	Earth Ethics	
ENST 335L	The Environmental Vision	
ENST 367	Environmental Politics & Policies	
ENST 373A	Nature Works	
ENST 382	Environmental Law	
ENST 391	Special Topics/Experimental Courses	
ENST 395	Field Studies: Env. Studies	
ENST 396	Supervised Internship (PEAS)	
ENST 398	Cooperative Education/Intern	
ENST 420	US Environmental Movement	
ENST 427	Social Issues:The Mekong Delta	
ENST 430	Culture & Agriculture	
ENST 437	Climate Change: Mekong Delta	
ENST 472	Gen Sci: Conservation Education	
ENST 476	Environmental Citizenship	
ENST 480	Food Justice and Sustainability	
ENST 487	Globalization, Justice & Environment	
ENST 489S	Environmental Justice Issues & Solutions	
ENST 491	Special Topics/Experimental Courses	
ENST 492	Independent Study	
ENST 493	Study Abroad: Environmental Justice Latin America	
ENST 494	Seminar/Workshop	
ENST 499	Senior Thesis/Capstone	

CODE	TITLE	HOURS
GPHY 421	Sustainable Cities	
PHL 323	Ethics of Climate Change	
Total Hours		13

Course List

Minimum Required Grade: C-

Ecology

CODE	TITLE	HOURS
Complete one of the following courses:		3
BIOE 172N	Introductory Ecology	
BIOE 370	General Ecology	
ENSC 360	Applied Ecology	
FORS 330	Forest Ecology	
Total Hours		3

Course List

Minimum Required Grade: C-

Community Agriculture Certificate < University of Montana

Community Agriculture Certificate

- Overview
- Requirements

The Certificate in Community Agriculture develops participants' knowledge and skills to effectively participate in or manage urban/community farms that combine food production with a focus on addressing economic, health, and/or social justice concerns.

NB: Students must achieve at least an overall grade point average of 3.0 for courses within the certificate program. The certificate will only be awarded upon the successful completion of all requirements and the attainment of an undergraduate degree.

Post-Secondary Certificate - Community Agriculture

College of Humanities & Sciences

Degree Specifics: 21

Required Cumulative GPA: 3.0

Catalog Year: 2019-2020

Summary

CODE	TITLE	HOURS
Required Courses		18
Elective Courses		3
Total Hours		21

Course List

Required Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
ENST 396	Supervised Internship (PEAS)	6
ENST 398	Cooperative Education/Intern	6
ENST 430	Culture & Agriculture	3
ENST 480	Food Justice and Sustainability	3
Total Hours		18

Course List

Minimum required grade: C-

Elective Courses

CODE	TITLE	HOURS
Complete a 3-credit course on social organization, social factors influencing human behavior, and/or the practice of facilitating and leading groups. Advisor approval of course selection is required.		3
S W 300	Hum Behav & Soc Environ	
SOCI 350	The Community	
Total Hours		3

Course List

Minimum required grade: C-

Geosciences Department < University of Montana

Geosciences Department

- Overview
- Programs

Rebecca Bendick Kier and Andrew Wilcox, Co-Chairs

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.

Undergraduate

- Geosciences B.S.
- Geosciences B.S., Earth Science Education Concentration
- International Field Geosciences Dual B.S.
- International Field Geosciences Joint B.S.

Undergraduate Minors

- Geosciences

Geosciences B.S. < University of Montana

Geosciences B.S.

Bachelor of Science - Geosciences

College of Humanities & Sciences

Degree Specific Credits: 62

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: This option is designed for students who seek post-graduate employment as a professional geoscientist or preparation for graduate study in geosciences.

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

CODE	TITLE	HOURS
Lower-Division Core		8
Degree Electives		24
Cognate Sciences		30
Physics		
Chemistry		
Math		
Computer Science		
Total Hours		62

Course List

Lower-Division Core

Rule: Complete all of the courses in one of two options. Completion of either option fulfills the Lower Division Core requirements.

Option 1

CODE	TITLE	HOURS
Complete all of the following courses:		
GEO 101N	Introduction to Physical Geology	3
GEO 102N	Introduction to Physical Geology Lab	1
GEO 211	Earth's History and Evolution	4
Total Hours		8

Course List

Minimum Required Grade: C-

Option 2

CODE	TITLE	HOURS
Complete all of the following courses:		
GEO 103N	Introduction to Environmental Geology	3
GEO 104N	Introduction to Environmental Geology Laboratory	1
GEO 211	Earth's History and Evolution	4
Total Hours		8

Course List

Minimum Required Grade: C-

Degree Electives

CODE	TITLE	HOURS
Complete 24 credits of the following courses:		24
GEO 225	Earth Materials	
GEO 291	Special Topics	
GEO 305	Igneous & Metamorph Petrology	
GEO 309	Sedimentation/Stratigraphy	
GEO 311	Paleobiology	
GEO 315	Structural Geology	
GEO 318	Climate System Dynamics	
GEO 320	Global Water	
GEO 327	Geochemistry	
GEO 391	Special Topics	
GEO 420	Hydrogeology	
GEO 421	Hydrology	
GEO 433	Global Tectonics	
GEO 439	Geophysics	
GEO 443	Principles of Sedimentary Petrology	
GEO 460	Process Geomorphology	
GEO 482	Global Change	
GEO 488	Snow, Ice and Climate	
GEO 491	Special Topics	
Total Hours		24

Course List

Minimum Required Grade: C-

Cognate Sciences

Rule: In addition to completing course work in Geosciences, a minimum of 30 credits in cognate science classes must be completed. More advanced courses in Chemistry, Computer Science, Math, and Physics may be used to meet the 30 credit minimum total in cognate sciences. BIOB 101N or above is also appropriate. Course substitutions for the 30 credit minimum in cognate sciences must be approved by a departmental advisor.

Physics

CODE	TITLE	HOURS
Complete one of the following sequences:		10
Algebra- and Trigonometry-based Physics:		
PHSX 205N & PHSX 206N	College Physics I and College Physics I Laboratory	
PHSX 207N & PHSX 208N	College Physics II and College Physics II Laboratory	
Calculus-based Physics:		
PHSX 215N & PHSX 216N	Fund of Physics w/Calc I and Physics Laboratory I w/Calc	
PHSX 217N & PHSX 218N	Fund of Physics w/Calc II and Physics Laboratory II w/Calc	

Course List

Minimum Required Grade: C-

Chemistry

CODE	TITLE	HOURS
Complete one of the following:		3-5
CHMY 121N	Introduction to General Chemistry	
CHMY 141N & CHMY 142N	College Chemistry I and College Chemistry I Lab	
Total Hours		3-5

Course List

Minimum Required Grade: C-

Mathematics

CODE	TITLE	HOURS
Complete all of the following courses:		
M 171	Calculus I	4
M 172	Calculus II	4
Total Hours		8

Course List

Minimum Required Grade: C-

Computer Science

Note: These courses are recommended to complete the Computer Science requirement. Credit may be received for only 2 of these 3 courses as needed to meet the 30 credit minimum cognate science requirement.

CODE	TITLE	HOURS
Complete one or two of the following courses:		3-7
CSCI 172	Intro to Computer Modeling	
GPHY 284	Intro to GIS and Cartography	
STAT 216	Introduction to Statistics	
Total Hours		3-7

Course List

Minimum Required Grade: C-

Geosciences B.S. - Earth Science Education Concentration

- Overview
- Requirements

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 Teaching and Learning. Individuals must complete the teaching track within that degree program, which may contain different course requirements than the non-teaching track 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 Concentration

College of Humanities & Sciences

Degree Specific Credits: 66

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Teaching and Learning 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 the teaching track of a second major or minor in another content area.

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

Course List		
CODE	**TITLE**	**HOURS**
Lower-Division Core Courses		15
Geosciences Core		
Environmental Geoscience Course		
Upper-Division Geoscience Courses		17
Upper-Division Geoscience Core Courses		
Upper-Division Geoscience Elective Course		
Physics		10
Chemistry		9
Math		8
Astronomy		3
Teaching Methods Course		4
Total Hours		66

Lower-Division Core

Geosciences Core

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
GEO 101N	Introduction to Physical Geology	3
GEO 102N	Introduction to Physical Geology Lab	1
GEO 211	Earth's History and Evolution	4
GEO 225	Earth Materials	4
Total Hours		12

Minimum Required Grade: C-

Environmental Geoscience Course

Course List		
CODE	**TITLE**	**HOURS**
Complete the following course:		
GEO 105N	Oceanography	3
Total Hours		3

Minimum Required Grade: C-

Upper-Division Geoscience Courses

Upper-Division Geoscience Core Courses

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
GEO 304E	Science and Society	3
GEO 311	Paleobiology	3
GEO 315	Structural Geology	4
GEO 318	Climate System Dynamics	4
Total Hours		14

Minimum Required Grade: C-

Elective Upper-Division Geoscience Course

Note: GEO 320 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 List		
CODE	**TITLE**	**HOURS**
Complete one additional GEO course at the 300- or 400-level.		3

Physics

Course List		
CODE	**TITLE**	**HOURS**
Complete one of the following Physics sequences:		10
Algebra- and Trigonometry-based Physics:		
PHSX 205N & PHSX 206N	College Physics I and College Physics I Laboratory	
PHSX 207N & PHSX 208N	College Physics II and College Physics II Laboratory	
Calculus-based Physics:		
PHSX 215N & PHSX 216N	Fund of Physics w/Calc I and Physics Laboratory I w/Calc	
PHSX 217N & PHSX 218N	Fund of Physics w/Calc II and Physics Laboratory II w/Calc	
Total Hours		10

Minimum Required Grade: C-

Chemistry

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
CHMY 121N	Introduction to General Chemistry	4
CHMY 485	Laboratory Safety	1
Total Hours		5

Minimum Required Grade: C-

Mathematics

Course List		
CODE	**TITLE**	**HOURS**
Complete one math and one statistics course:		
Complete one of the following courses:		4
M 162	Applied Calculus	
M 171	Calculus I	
Complete the following courses:		
STAT 216	Introduction to Statistics	4
Total Hours		8

Minimum Required Grade: C-

Astronomy

Course List		
CODE	**TITLE**	**HOURS**
Complete the following course:		
ASTR 131N	Planetary Astronomy	3
Total Hours		3

Minimum Required Grade: C-

Teaching Methods Course

Note: The EDU 497 course number is used for multiple courses. Students should register for EDU 497 Methods: 5-12 Science.

Course List		
CODE	**TITLE**	**HOURS**
Complete the following course:		
EDU 497	Teaching and Assessing	4
Total Hours		4

Minimum Required Grade: C-

Secondary Teaching Licensure

Note: For endorsement to teach earth science, a student also must gain admission to the Teacher Education Program and meet all the requirements for secondary teaching licensure. For more information, see the Teaching and Learning Department.

Geosciences Minor < University of Montana

Geosciences Minor

Minor - Geosciences

College of Humanities & Sciences

Degree Specific Credits: 18

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Summary

CODE	TITLE	HOURS
Lower-Division Core Courses		8
Minor Electives		10
Total Hours		18

Course List

Lower-Division Core Courses

Rule: Must complete all of the courses in one of two options. Completion of either option fulfills the Lower Division Core requirement. Completion of all the courses in one option is recommended, but alternative sequences may be approved by a Geosciences advisor.

Option 1

CODE	TITLE	HOURS
Complete all of the following courses:		
GEO 101N	Introduction to Physical Geology	3
GEO 102N	Introduction to Physical Geology Lab	1
GEO 211	Earth's History and Evolution	4
Total Hours		8

Course List

Minimum Required Grade: C-

Option 2

CODE	TITLE	HOURS
Complete all of the following courses:		
GEO 103N	Introduction to Environmental Geology	3
GEO 104N	Introduction to Environmental Geology Laboratory	1
GEO 211	Earth's History and Evolution	4
Total Hours		8

Course List

Minimum Required Grade: C-

Minor Electives

CODE	TITLE	HOURS
Complete an additional 10 credits in Geosciences courses numbered 200 and above.		10
Total Hours		10

Course List

Minimum Required Grade: C-

International Field Geosciences Dual < University of Montana

International Field Geosciences Dual

Bachelor of Science - International Field Geosciences Dual

College of Humanities & Sciences

Degree Specific Credits: 100-107

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: 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 attending classes and living overseas. 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 University of Potsdam. The degree requirements specified below pertain both to UM-based and Potsdam-based students seeking their UM diploma. Potsdam-based students are eligible to satisfy any of the following specific requirements through credits that are transferred from the University of Potsdam and approved as equivalent by the UM Geosciences undergraduate advisors.

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

CODE	TITLE	HOURS
Lower-Division Core		12
Upper-Division Core		8
Degree Electives		17
Physics		10
Chemistry		8-10
Math		7-8
Computer Science		3-4
Language Requirement		8
Overseas Coursework		27-30
Total Hours		100-107

Course List

Lower-Division Core

CODE	TITLE	HOURS
Complete all of the following courses:		
GEO 101N	Introduction to Physical Geology	3
GEO 102N	Introduction to Physical Geology Lab	1
GEO 211	Earth's History and Evolution	4
GEO 225	Earth Materials	4
Total Hours		12

Course List

Minimum Required Grade: C-

Upper-Division Core

CODE	TITLE	HOURS
Complete all of the following courses:		
GEO 315	Structural Geology	4
GEO 318	Climate System Dynamics	4
Total Hours		8

Course List

Minimum Required Grade: C-

Degree Electives

CODE	TITLE	HOURS
Complete 17 credits of the following courses:		17
GEO 305	Igneous & Metamorph Petrology	
GEO 309	Sedimentation/Stratigraphy	
GEO 311	Paleobiology	
GEO 320	Global Water	
GEO 327	Geochemistry	
GEO 420	Hydrogeology	
GEO 433	Global Tectonics	
GEO 460	Process Geomorphology	
GEO 491	Special Topics	
Total Hours		17

Course List

Minimum Required Grade: C-

Physics

CODE	TITLE	HOURS
Complete one of the following Physics sequences:		10
Algebra- and Trigonometry-based Physics:		
PHSX 205N & PHSX 206N	College Physics I and College Physics I Laboratory	
PHSX 207N & PHSX 208N	College Physics II and College Physics II Laboratory	
Calculus-based Physics:		
PHSX 215N & PHSX 216N	Fund of Physics w/Calc I and Physics Laboratory I w/Calc	
PHSX 217N & PHSX 218N	Fund of Physics w/Calc II and Physics Laboratory II w/Calc	
Total Hours		10

Course List

Minimum Required Grade: C-

Chemistry

CODE	TITLE	HOURS
Complete one of the following courses:		4-5
CHMY 121N	Introduction to General Chemistry	
CHMY 141N & CHMY 142N	College Chemistry I and College Chemistry I Lab	
Total Hours		4-5

Course List

Minimum Required Grade: C-

Math

CODE	TITLE	HOURS
Complete all of the following courses:		
M 171	Calculus I	4
M 172	Calculus II	4
Total Hours		8

Course List

Minimum Required Grade: C-

Computer Science

CODE	TITLE	HOURS
Complete one of the following courses:		3-4
GPHY 284	Intro to GIS and Cartography	
STAT 216	Introduction to Statistics	
Total Hours		3-4

Course List

Minimum Required Grade: C-

Language Requirement

Rule: UM outgoing students must complete the following language sequence (the "test out provision" applies as administered by the Department of Modern and Classical Languages and Literatures).

CODE	TITLE	HOURS
Complete all of the following courses:		
GRMN 101	Elementary German I	4
GRMN 102	Elementary German II	4
Total Hours		8

Course List

Minimum Required Grade: C-

Overseas Coursework

CODE	TITLE	HOURS
Complete the following courses and field work at the University of Potsdam:		27-30
Complete one of the following field courses run by the University of Potsdam:		
BP 15 (Field Course - France)		
BW01 (Field Course - Norway)		
BW02 (field Course - Alps)		
Complete 4 of the following courses offered by the University of Potsdam:		
Regional Geology		
Paleoclimate @ Quaternary Geology		
Analysis of Geologic Maps		
Analytic Geochemistry		
Natural Hazards		
Tectonophysics & Rheology		
Seismology		
Seismics		
Geoelectrics		
Sedimentary Systems & Stratigrahic Geomorphology		
Tectonics and Geodynamics		
Complete 2 additional cognate science courses at the University of Potsdam		
Total Hours		27-30

Course List

Minimum Required Grade: C-

International Field Geosciences Joint < University of Montana

International Field Geosciences Joint

Bachelor of Science - International Field Geosciences Joint

College of Humanities & Sciences

Degree Specific Credits: 108-115

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: 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 attending classes and living overseas. Most of the course work completed during the year abroad will take place at University College Cork (UCC) in Ireland. 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.

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

CODE	TITLE	HOURS
Lower-Division Core		12
Upper-Division Core		12
Degree Electives		15
Physics		10
Chemistry		8-10
Math		7-8
Computer Science		3-4
Language Requirement		8
German		
Irish		
Overseas Coursework		33-36
Total Hours		108-115

Course List

Lower-Division Core

CODE	TITLE	HOURS
Complete all of the following courses:		
GEO 101N	Introduction to Physical Geology	3
GEO 102N	Introduction to Physical Geology Lab	1
GEO 211	Earth's History and Evolution	4
GEO 225	Earth Materials	4
Total Hours		12

Course List

Minimum Required Grade: C-

Upper-Division Core

Rule: Complete all of the following subcategories. 12 total credits required.

Subcategory 1

CODE	TITLE	HOURS
Complete all of the following courses:		
GEO 315	Structural Geology	4
GEO 318	Climate System Dynamics	4
Total Hours		8

Course List

Minimum Required Grade: C-

Subcategory 2

CODE	TITLE	HOURS
Complete one of the following courses:		4
GEO 309	Sedimentation/Stratigraphy	
GEO 443	Principles of Sedimentary Petrology	
Total Hours		4

Course List

Minimum Required Grade: C-

Degree Electives

CODE	TITLE	HOURS
Complete 15 credits of the following courses:		15
GEO 305	Igneous & Metamorph Petrology	
GEO 309	Sedimentation/Stratigraphy	
GEO 311	Paleobiology	
GEO 320	Global Water	
GEO 327	Geochemistry	
GEO 420	Hydrogeology	
GEO 433	Global Tectonics	
GEO 443	Principles of Sedimentary Petrology	
GEO 460	Process Geomorphology	
GEO 491	Special Topics	
Total Hours		15

Course List

Minimum Required Grade: C-

Physics

CODE	TITLE	HOURS
Complete one of the following Physics sequences:		10
Algebra- and Trigonometry-based Physics:		
PHSX 205N & PHSX 206N	College Physics I and College Physics I Laboratory	
PHSX 207N & PHSX 208N	College Physics II and College Physics II Laboratory	
Calculus-based Physics:		
PHSX 215N & PHSX 216N	Fund of Physics w/Calc I and Physics Laboratory I w/Calc	
PHSX 217N & PHSX 218N	Fund of Physics w/Calc II and Physics Laboratory II w/Calc	
Total Hours		10

Course List

Minimum Required Grade: C-

Chemistry

CODE	TITLE	HOURS
Complete one of the following courses:		4-5
CHMY 121N	Introduction to General Chemistry	
CHMY 141N & CHMY 142N	College Chemistry I and College Chemistry I Lab	
Total Hours		4-5

Course List

Minimum Required Grade: C-

Math

CODE	TITLE	HOURS
Complete all of the following courses:		
M 171	Calculus I	4
M 172	Calculus II	4
Total Hours		8

Course List

Minimum Required Grade: C-

Computer Science

CODE	TITLE	HOURS
Complete one of the following courses:		3-4
GPHY 284	Intro to GIS and Cartography	
STAT 216	Introduction to Statistics	
Total Hours		3-4

Course List

Minimum Required Grade: C-

Language Requirement

Note: The "test out provision" applies as administered by the Department of Modern and Classical Languages and Literature.

CODE	TITLE	HOURS
Complete one of the following language sequences:		8
German		
GRMN 101	Elementary German I	
GRMN 102	Elementary German II	
Irish		
IRSH 101	Elementary Irish	
IRSH 102	Elementary Irish II	
Total Hours		8

Course List

Minimum Required Grade: C-

Overseas Coursework

CODE	TITLE	HOURS
In addition to Geosciences coursework completed at UM, complete the following courses and field work at University College of Cork and the University of Potsdam:		33-36
Complete 1 of the following formal field course modules run by University College Cork:		
GL 2016 (Easter Field Course - Dingle Peninsula)		
GL 3019 (Easter Field Course - Western Scotland)		
ER 3002 (Easter Field Course - North Clare)		
GL 4008 (Easter Field Course - Central Greece)		
Another equivalent-level field course run by UCC and approved apriori by their UCC and UM advisors		
While in residence at Cork, complete any 9 of the following courses in consultation with UCC and UM advisors:		
Sed Processes and Petrology		
Igneous and MM Petrology		
Invertebrate Paleontology & Evolution		
Plate Tectonics & Global Geophysics		
Igneous Petrogenesis & Geochemistry		
Metamorphism & Geochronology		
Advanced Structural Geology		
Sedimentary Environments		
Stratigraphy & Geologic Maps		
Environmental Geology		
Terr Ecosystems Through Time		
Micropaleontology & Palynology		
Petroleum Geology & Basin Analysis		
Applied Geophysics & Computer Applications		
Advanced Igneous Petrology		
Hydrogeology		
Complete 1 formal upper-level Geosciences course at the University of Potsdam. Recommended are courses that focus on computer-based visualization or geoscience data using GIS or other visualization platforms.		
Total Hours		33-36

Course List

Minimum Required Grade: C-

History Department

Kyle Volk, Chair

The History Department offers an exciting program of instruction for undergraduates in search of an education. The curriculum is designed to provide knowledge and understanding of the background and ramifications of present local, national, and world affairs. The program emphasizes historical analysis and critical thought rather than the memorization of facts. History majors are taught how to read critically, analyze thoughtfully, conduct research carefully, and write intelligently.

The department offers a wide variety of courses ranging in time, space, and theme. Courses span the full range of American history from the colonial period through the recent past. More specialized courses in local and regional history focus on Montana, the West, and the northern Rockies. Offerings in European and world history emphasize social, cultural, and intellectual history, French and German history, British history, Russian and Soviet history, Latin American history, Islamic civilization, East Asian history, and Central and Southwest Asian history. Topical courses explore issues of democracy, diplomacy, human rights, war and peace, terrorism, race and gender, religion, and environmental history.

History provides not only a basis for future employment but also, more importantly, furnishes knowledge and perspective for intelligent leadership in community affairs. Graduates are employed in federal, state, or local governments, with positions ranging from elected office to research analysts. Many teach history in middle schools and high schools while others pursue advanced degrees at the graduate level. Still others go on to attain professional degrees in law, journalism, and business.

The History Department at the University of Montana boasts professors with award-winning scholarship and active research agendas, which greatly enhances the education and training we provide to our students.

The Department offers the

- Bachelor of Arts,
- Bachelor of Arts for teaching,
- Master of Arts, and
- the Doctor of Philosophy degrees.

Our graduate students have found great success in a diverse range of occupations in public history, in education, and in academia.

Undergraduate

- History B.A.
- History B.A., History Education Concentration
- History-Political Science B.A.

Undergraduate Minor

- History

History B.A. < University of Montana

History B.A.

Bachelor of Arts - History

College of Humanities & Sciences

Degree Specific Credits: 40

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

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.

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

CODE	TITLE	HOURS
Lower-Division Core Courses		9
Methods		
Introductory History		
American History Electives		6
World History Electives		6
European History Electives		6
Advanced Writing Courses in History		3
Additional History Courses		10
Total Hours		40

Course List

Lower-Division Core Courses

Rule: Complete the following subcategories. 9 total credits required.

Methods

CODE	TITLE	HOURS
Complete the following course:		
HSTR 200	Intro: Historical Methods	1
Total Hours		1

Course List

Minimum Required Grade: C-

Introductory History

Note: 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.

CODE	TITLE	HOURS
Complete two of the following courses:		8
HSTA 101H	American History I	
or HSTA 103H	Honors American History I	
HSTA 102H	American History II	
or HSTA 104H	Honors American History II	
HSTR 101H	Western Civilization I	
or HSTR 103H	Honors Western Civilization I	
HSTR 102H	Western Civilization II	
or HSTR 104H	Honors Western Civilization II	
Total Hours		8

Course List

Minimum Required Grade: C-

American History Electives

Note: Courses with historical content offered in other departments at UM may count toward the History degree with consent of the History Department chair.

CODE	TITLE	HOURS
Complete 6 credits of the following courses:		6
AAST 141H	Black: From Africa to Hip-Hop	
HSTA 101H	American History I	
HSTA 102H	American History II	
HSTA 103H	Honors American History I	
HSTA 104H	Honors American History II	
HSTA 191	Special Topics	
HSTA 255	Montana History	
HSTA 262	Abolitionism	
HSTA 291	Special Topics	
HSTA 315	Early American Republic	

CODE	TITLE	HOURS
HSTA 316	American Civil War Era	
HSTA 320	Birth of Modern US	
HSTA 321	America in Crisis	
HSTA 322	U.S. History: WWII to Present	
HSTA 323	U.S. in the 1950s	
HSTA 324	U.S. in the 1960s	
HSTA 333	American Military History	
HSTA 335	Movie America	
HSTA 342H	Afr Amer Hist to 1865	
HSTA 343H	Afr Amer Hist Since 1865	
HSTA 347	Voodoo, Muslim, Church: Black Religion	
HSTA 344	African-American Struggle for Equality	
HSTA 361	The American South	
HSTA 370H	Wmn Amer Colonial to Civil War	
HSTA 371H	Wmn Amer Civil War to Present	
HSTA 377	Alcohol in American History	
HSTA 380	American Constitutional History	
HSTA 382H	History of American Law	
HSTA 385	Families & Children in America	
HSTA 391	Special Topics	
HSTA 415	The Black Radical Tradition	
HSTA 417	Prayer & Civil Rights	
HSTA 461	Research in Montana History	
HSTA 471	Writing Women's Lives	
HSTA 491	Special topics	
HSTA 494	Seminar	
HSTR 300	Writing For History	
HSTR 364	Environmental History	
HSTR 369	20th Cent Amer West	
HSTR 400	Historical Research Seminar	
Total Hours		6

Course List

Minimum Required Grade: C-

World History Electives

Note: Courses with historical content offered in other departments at UM may count toward the History degree with consent of the History Department chair.

CODE	TITLE	HOURS
Complete 6 credits of the following courses:		6
ANTY 141H	The Silk Road	
HSTR 191	Special Topics	
HSTR 230H	Colonial Latin America	
HSTR 231H	Modern Latin America	
HSTR 240H	East Asian Civilizations	
HSTR 241H	Central Asian Cult & Civ	
HSTR 262H	Islamic Civil: Classical Age	
HSTR 264H	Islamic Civ: Modrn Era	
HSTR 272E	Terrorism:Viol Mod Wrld	
HSTR 291	Special Topics	
HSTR 291H	Special Topics	
HSTR 300	Writing For History	
HSTR 334	Latin America: Reform & Revolution	
HSTR 335	Latin America: Workers & Labor	
HSTR 345H	Modern China	
HSTR 368	Iran Between Two Revolutions	
HSTR 386	Nationalism Modern Middle East	
HSTR 391	Special Topics	
HSTR 392	Independent Study	
HSTR 400	Historical Research Seminar	
HSTR 435	Lat Am Human Rgts & Memory	
HSTR 437	US-Latin America Relations	
HSTR 491	Special Topics	
HSTR 492	Independent Study	
Total Hours		6

Course List

Minimum Required Grade: C

European History Electives

Note: Courses with historical content offered in other departments at UM may count toward the History degree with consent of the History Department chair.

CODE	TITLE	HOURS
Complete 6 credits of the following courses:		6
HSTR 101H	Western Civilization I	
HSTR 102H	Western Civilization II	
HSTR 103H	Honors Western Civilization I	
HSTR 104H	Honors Western Civilization II	
HSTR 300	Writing For History	
HSTR 301X	Ancient Greek Social History	
HSTR 302H	Ancient Greece	
HSTR 304H	Ancient Rome	
HSTR 312	Age of Absolut 1648-1789	
HSTR 315	Reformation	
HSTR 320	European Social and Intellectual History: 1450-1789	
HSTR 323	European Social and Intellectual History: The 19th Century	
HSTR 325	European Social and Intellectual History: The 20th Century	
HSTR 326	Contemporary Europe	
HSTR 348	Britain 1485-1688	
HSTR 349	Britain from Rev - Reform 1688	
HSTR 350	Modern Britain	
HSTR 352	France Revol 1789-1848	
HSTR 353	Modern France	
HSTR 354	Italy: 1300-1800	
HSTR 355	Italy: 1800-Present	
HSTR 357	Russia to 1881	
HSTR 358	Russia Since 1881	
HSTR 361	Germ:Augsburg-Bismarck	
HSTR 363	Eastern Europe	
HSTR 377	European Internal Relat	
HSTR 391	Special Topics	
HSTR 392	Independent Study	

CODE	TITLE	HOURS
HSTR 400	Historical Research Seminar	
HSTR 401	The Great Historians	
HSTR 418	Britain 1500 - 1800	
HSTR 491	Special Topics	
HSTR 492	Independent Study	
Total Hours		6

Course List

Minimum Required Grade: C-

Advanced Writing Courses in History

CODE	TITLE	HOURS
Complete one of the following courses:		3
HSTA 415	The Black Radical Tradition	
HSTA 417	Prayer & Civil Rights	
HSTA 461	Research in Montana History	
HSTA 471	Writing Women's Lives	
HSTR 400	Historical Research Seminar	
HSTR 418	Britain 1500 - 1800	
HSTR 437	US-Latin America Relations	
Total Hours		3

Course List

Minimum Required Grade: C-

History B.A. - History Education

- Overview
- Requirements

Individuals interested in teaching in K-12 schools must complete a degree in the content area they want to teach plus the Teacher Education Program through the Department of Teaching and Learning. Individuals must complete the 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, students will be eligible for a standard Montana teaching license in this content area.

- Secondary Education Licensure Program
- Licensure Degree Requirements

Bachelor of Arts - History; History Education Concentration

College of Humanities & Sciences

Degree Specific Credits: 46

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Notes:

- 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 Teaching and Learning in the College of Education and Human Sciences for more information.
- Students who choose to complete the concentration in History Education must also complete the teaching track/concentration in a major or minor in a second field.

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

Course List		
CODE	**TITLE**	**HOURS**
Lower-Division Core Courses		12
American History Introductory Course		
European History Introductory Course		
Montana History		
Historical Methods Course		
American History Upper-Division Electives		6
World History Electives		9
European Upper-Division History Electives		6
Upper-Division History Electives		6
Teaching Methods Requirement		4
Advanced Writing in History Requirement		3
Total Hours		46

Lower-Division Core Courses

Rule: Complete the following subcategories. 12 total credits required.

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.

American History Introductory Course

Course List		
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		4
HSTA 101H	American History I	
or HSTA 103H	Honors American History I	
HSTA 102H	American History II	
or HSTA 104H	Honors American History II	
Total Hours		4

Minimum Required Grade: C-

European History Introductory Course

Course List		
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		4
HSTR 101H	Western Civilization I	
or HSTR 103H	Honors Western Civilization I	
HSTR 102H	Western Civilization II	
or HSTR 104H	Honors Western Civilization II	
Total Hours		4

Minimum Required Grade: C-

Montana History

Course List		
CODE	**TITLE**	**HOURS**
Complete the following course:		
HSTA 255	Montana History	3
Total Hours		3

Minimum Required Grade: C-

Historical Methods Course

Course List		
CODE	**TITLE**	**HOURS**
Complete the following course:		
HSTR 200	Intro: Historical Methods	1
Total Hours		1

Minimum Required Grade: C-

American History Upper-Division Electives

Course List		
CODE	**TITLE**	**HOURS**
Complete 6 credits of the following courses:		6
HSTA 315	Early American Republic	
HSTA 316	American Civil War Era	
HSTA 320	Birth of Modern US	
HSTA 321	America in Crisis	
HSTA 322	U.S. History: WWII to Present	
HSTA 323	U.S. in the 1950s	
HSTA 324	U.S. in the 1960s	
HSTA 333	American Military History	
HSTA 335	Movie America	
HSTA 342H	Afr Amer Hist to 1865	
HSTA 343H	Afr Amer Hist Since 1865	
HSTA 344	African-American Struggle for Equality	
HSTA 347	Voodoo, Muslim, Church: Black Religion	
HSTA 361	The American South	
HSTA 370H	Wmn Amer Colonial to Civil War	
HSTA 371H	Wmn Amer Civil War to Present	
HSTA 377	Alcohol in American History	
HSTA 380	American Constitutional History	
HSTA 382H	History of American Law	
HSTA 385	Families & Children in America	
HSTA 391	Special Topics	
HSTA 491	Special topics	
HSTA 494	Seminar	
HSTR 364	Environmental History	
HSTR 369	20th Cent Amer West	
Total Hours		6

Minimum Required Grade: C-

World History Electives

Course List		
CODE	**TITLE**	**HOURS**
Complete 9 credits of the following courses:		9
ANTY 141H	The Silk Road	
HSTR 191	Special Topics	
HSTR 230H	Colonial Latin America	
HSTR 231H	Modern Latin America	
HSTR 240H	East Asian Civilizations	
HSTR 241H	Central Asian Cult & Civ	
HSTR 262H	Islamic Civil: Classical Age	
HSTR 264H	Islamic Civ: Modrn Era	
HSTR 272E	Terrorism:Viol Mod Wrld	
HSTR 291	Special Topics	
HSTR 291H	Special Topics	
HSTR 300	Writing For History	
HSTR 334	Latin America: Reform & Revolution	
HSTR 335	Latin America: Workers & Labor	
HSTR 345H	Modern China	
HSTR 368	Iran Between Two Revolutions	
HSTR 386	Nationalism Modern Middle East	
HSTR 391	Special Topics	
HSTR 392	Independent Study	
HSTR 435	Lat Am Human Rgts & Memory	
HSTR 437	US-Latin America Relations	
HSTR 491	Special Topics	
HSTR 492	Independent Study	
Total Hours		9

Minimum Required Grade: C-

European Upper-Division History Electives

Course List		
CODE	**TITLE**	**HOURS**
Complete 6 credits of the following courses:		6
HSTR 300	Writing For History	
HSTR 301X	Ancient Greek Social History	
HSTR 302H	Ancient Greece	
HSTR 304H	Ancient Rome	
HSTR 312	Age of Absolut 1648-1789	
HSTR 315	Reformation	
HSTR 320	European Social and Intellectual History: 1450-1789	
HSTR 325	European Social and Intellectual History: The 20th Century	
HSTR 323	European Social and Intellectual History: The 19th Century	
HSTR 348	Britain 1485-1688	
HSTR 349	Britain from Rev - Reform 1688	
HSTR 352	France Revol 1789-1848	
HSTR 353	Modern France	
HSTR 354	Italy: 1300-1800	
HSTR 355	Italy: 1800-Present	
HSTR 357	Russia to 1881	
HSTR 358	Russia Since 1881	
HSTR 361	Germ:Augsburg-Bismarck	
HSTR 363	Eastern Europe	
HSTR 377	European Internal Relat	
HSTR 391	Special Topics	
HSTR 401	The Great Historians	
HSTR 491	Special Topics	
Total Hours		6

Minimum Required Grade: C-

Upper-Division History Electives

Course List		
CODE	**TITLE**	**HOURS**
Complete two additional HSTA or HSTR courses at the 300-level and above.		6
Total Hours		6

Minimum Required Grade: C-

Teaching Methods Requirement

Note: The EDU 497 course number is used for multiple courses. Students should register for EDU 497 Methods: 5-12 Social Studies.

Course List		
CODE	**TITLE**	**HOURS**
Complete the following course:		
EDU 497	Teaching and Assessing	4
Total Hours		4

Minimum Required Grade: C-

Advanced Writing in History Requirement

Course List		
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		3
HSTA 415	The Black Radical Tradition	
HSTA 417	Prayer & Civil Rights	
HSTA 461	Research in Montana History	
HSTA 471	Writing Women's Lives	
HSTR 400	Historical Research Seminar	
HSTR 418	Britain 1500 - 1800	
HSTR 437	US-Latin America Relations	
Total Hours		3

Minimum Required Grade: C-

Secondary Teaching Licensure

Note: For endorsement to teach history, a student also must gain admission to the Teacher Education Program and meet all the requirements for secondary teaching licensure. For more information, see the Teaching and Learning Department.

History-Political Science B.A.

- Overview
- 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.

Individuals interested in teaching in K-12 schools must complete a degree in the content area they want to teach plus the Teacher Education Program through the Department of Teaching and Learning. Individuals must complete the 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, students will be eligible for a standard Montana teaching license in this content area.

- Secondary Education Licensure Program
- Licensure Degree Requirements

Bachelor of Arts - History-Political Science

College of Humanities & Sciences

Degree Specific Credits: 71

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Notes:

- 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.
- 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 Teaching and Learning for more information.

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

Course List		
CODE	**TITLE**	**HOURS**
History Requirements		28
Lower-Division Core History Requirements		
American History Introductory Courses		
Western History Introductory Courses		
American History Elective		
World History Elective		
European History Elective		
Advanced Writing in History Requirement		
Political Science Requirements		30
Lower-Division Core Political Science Requirements		
American Government/Public Law Electives		
Comparative/International Relations Electives		
Additional Social Science Field Electives		9
Economics		
Geography		
Psychology		
Sociology		
Education Methods		4
Secondary Teaching Licensure		
Total Hours		71

History Requirements

Rule: Complete the following subcategories. 32 total credits required.

Lower-Division Core History Requirements

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
HSTA 255	Montana History	3
HSTR 200	Intro: Historical Methods	1
Total Hours		4

Minimum Required Grade: C-

American History Introductory Courses

Note: Student must select either the regular or honors version of a course to apply to the requirement.

Course List		
CODE	**TITLE**	**HOURS**
Complete two of the following courses:		8
HSTA 101H	American History I	
or HSTA 103H	Honors American History I	
HSTA 102H	American History II	
or HSTA 104H	Honors American History II	
Total Hours		8

Minimum Required Grade: C-

Western History Introductory Courses

Note: Student must select either the regular or honors version of a course to apply to the requirement.

Course List		
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		4
HSTR 101H	Western Civilization I	
or HSTR 103H	Honors Western Civilization I	
HSTR 102H	Western Civilization II	
or HSTR 104H	Honors Western Civilization II	
Total Hours		4

Minimum Required Grade: C-

American History Elective

Course List		
CODE	**TITLE**	**HOURS**
Complete 3 credits of the following courses:		3
HSTA 315	Early American Republic	
HSTA 316	American Civil War Era	
HSTA 320	Birth of Modern US	
HSTA 321	America in Crisis	
HSTA 322	U.S. History: WWII to Present	
HSTA 323	U.S. in the 1950s	
HSTA 324	U.S. in the 1960s	
HSTA 333	American Military History	
HSTA 335	Movie America	
HSTA 342H	Afr Amer Hist to 1865	
HSTA 343H	Afr Amer Hist Since 1865	
HSTA 344	African-American Struggle for Equality	
HSTA 347	Voodoo, Muslim, Church: Black Religion	
HSTA 361	The American South	
HSTA 370H	Wmn Amer Colonial to Civil War	
HSTA 371H	Wmn Amer Civil War to Present	
HSTA 377	Alcohol in American History	
HSTA 380	American Constitutional History	
HSTA 382H	History of American Law	
HSTA 385	Families & Children in America	
HSTA 391	Special Topics	
HSTA 491	Special topics	
HSTA 494	Seminar	
HSTR 364	Environmental History	
HSTR 369	20th Cent Amer West	
Total Hours		3

Minimum Required Grade: C-

World History Elective

Course List		
CODE	**TITLE**	**HOURS**
Complete 3 credits of the following courses:		3
ANTY 141H	The Silk Road	
HSTR 191	Special Topics	
HSTR 230H	Colonial Latin America	
HSTR 231H	Modern Latin America	
HSTR 240H	East Asian Civilizations	
HSTR 241H	Central Asian Cult & Civ	
HSTR 262H	Islamic Civil: Classical Age	
HSTR 264H	Islamic Civ: Modrn Era	
HSTR 272E	Terrorism:Viol Mod Wrld	
HSTR 291	Special Topics	
HSTR 300	Writing For History	
HSTR 334	Latin America: Reform & Revolution	
HSTR 335	Latin America: Workers & Labor	
HSTR 345H	Modern China	
HSTR 368	Iran Between Two Revolutions	
HSTR 386	Nationalism Modern Middle East	
HSTR 391	Special Topics	
HSTR 491	Special Topics	
HSTR 435	Lat Am Human Rgts & Memory	
Total Hours		3

Minimum Required Grade: C-

European History Elective

Course List		
CODE	**TITLE**	**HOURS**
Complete 3 credits of the following courses:		3
HSTR 300	Writing For History	
HSTR 301X	Ancient Greek Social History	
HSTR 302H	Ancient Greece	
HSTR 304H	Ancient Rome	
HSTR 312	Age of Absolut 1648-1789	
HSTR 315	Reformation	
HSTR 320	European Social and Intellectual History: 1450-1789	
HSTR 323	European Social and Intellectual History: The 19th Century	
HSTR 325	European Social and Intellectual History: The 20th Century	
HSTR 326	Contemporary Europe	
HSTR 348	Britain 1485-1688	
HSTR 349	Britain from Rev - Reform 1688	
HSTR 352	France Revol 1789-1848	
HSTR 353	Modern France	
HSTR 354	Italy: 1300-1800	
HSTR 355	Italy: 1800-Present	
HSTR 357	Russia to 1881	
HSTR 358	Russia Since 1881	
HSTR 361	Germ:Augsburg-Bismarck	
HSTR 363	Eastern Europe	
HSTR 377	European Internal Relat	
HSTR 391	Special Topics	
HSTR 491	Special Topics	
Total Hours		3

Minimum Required Grade: C-

Advanced Writing in History Requirement

Course List		
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		3
HSTA 415	The Black Radical Tradition	
HSTA 417	Prayer & Civil Rights	
HSTA 461	Research in Montana History	
HSTA 471	Writing Women's Lives	
HSTR 400	Historical Research Seminar	
HSTR 418	Britain 1500 - 1800	
HSTR 437	US-Latin America Relations	
Total Hours		3

Minimum Required Grade: C-

Political Science Requirements

Rule: Complete the following subcategories. 30 total credits required.

Lower-Division Core Political Science Requirements

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
PSCI 210S	Intro to American Government	3
PSCI 220S	Intro to Comparative Government	3
PSCI 230X	Intro to International Relations	3
PSCI 250E	Intro to Political Theory	3
Total Hours		12

Minimum Required Grade: C-

American Government/Public Law Electives

Course List		
CODE	**TITLE**	**HOURS**
Complete 9 credits of the following courses:		9
PSCI 340	Exp Offering: American Govt	
PSCI 341	Political Parties and Election	
PSCI 342	Media, Public Opinion, Polling	
PSCI 344	State and Local Government	
PSCI 345	American Political System	
PSCI 348	US Multicultural Politics	
PSCI 352	American Political Thought	
PSCI 365	Pub Policy Issues and Analysis	
PSCI 370	Courts and Judicial Politics	
PSCI 433	International Law & Org	
PSCI 440	Exp Offering: American Govt	
PSCI 443	Politics of Social Movements	
PSCI 444	Am Political Participation	
PSCI 445	Political Psychology	
PSCI 461	Administrative Law	
PSCI 462	Human Resource Management	
PSCI 468		
PSCI 471	American Constitutional Law	
PSCI 474	Civil Rights	
Total Hours		9

Minimum Required Grade: C-

Comparative/International Relations Electives

Course List		
CODE	**TITLE**	**HOURS**
Complete 3 credits of the following courses:		9
PSCI 311	Rev & Reform Modern China	
PSCI 320	Exp Offering: Comp Politics	
PSCI 322	Politics of Europe	
PSCI 324	Climate Policies: China & U.S.	
PSCI 325	Politics of Latin America	
PSCI 326	Politics of Africa	
PSCI 327	Politics of Mexico	
PSCI 328	Politics of China	
PSCI 330	Exp Offering: Intrnt Relations	
PSCI 332	Global Environmental Pol.	
PSCI 334	International Security	
PSCI 335	American Foreign Policy	
PSCI 336	European Union	
PSCI 337	Model United Nations	
PSCI 381	State Formation	
PSCI 420	Exp Offering: Comp Politics	
PSCI 430	Exp Offering: Intrnt Relations	
PSCI 431	Politics of Global Migration	
PSCI 433	International Law & Org	
PSCI 456	Chinese Polit & Soc Thought	
PSCI 463	Development Administration	
PSCI 481	Origins of Democracy and Authoritarianism	
PSCI 482	Politics of the World Economy	
Total Hours		9

Minimum Required Grade: C-

Additional Social Science Field Electives

Rule: Complete 1 of the following subcategories. 9 total credits required.

Economics

Note: ECNS 191,ECNS 391, ECNS 392, ECNS 491, and ECNS 492 may apply to this requirement depending on the course content.

Course List		
CODE	**TITLE**	**HOURS**
Complete 9 credits of the following courses:		9
ECNS 101S	Economic Way of Thinking	
ECNS 201S	Principles of Microeconomics	
ECNS 202S	Principles of Macroeconomics	
ECNS 217X	Issues in Economic Development	
ECNS 301	Intermediate Micro with Calc	
ECNS 302	Intermediate Macroeconomics	
ECNS 310	Intro Health Economics	
ECNS 312	Labor Economics	
ECNS 313	Money and Banking	
ECNS 320	Public Finance	
ECNS 403	Introduction to Econometrics	
ECNS 405	Game Theory	
ECNS 406	Industrial Organization	
ECNS 431	International Trade	
ECNS 433	Economics of the Environment	
ECNS 445	Int Env Econ & Clim Change	
ECNS 450	Adv. Topics in Economic Dev.	
ECNS 488	Res Meth & Thesis Design	
Total Hours		9

Minimum Required Grade: C-

Geography

Note: GPHY 391,GPHY 491, and GPHY 492 may apply to this requirement depending on the course content.

Course List		
CODE	**TITLE**	**HOURS**
Complete 9 credits of the following courses:		9
GPHY 111N	Intro to Physical Geography	
GPHY 112N	Intro to Phys Geography Lab	
GPHY 121S	Human Geography	
GPHY 141S	Geography of World Regions	
GPHY 144	Glacier National Park in Winter	

GPHY 241	Montana	
GPHY 245X	The Middle East	
GPHY 284	Intro to GIS and Cartography	
GPHY 291	Special Topics	
GPHY 314	Global Mountain Environments	
GPHY 317	Geomorphology	
GPHY 323S	Economic Geography of Rural Areas	
GPHY 335	Water Policy	
GPHY 338	Mountains and Society	
GPHY 342	North America	
GPHY 344	Crown of the Continent	
GPHY 347	Regional Geography (Multiple Regions)	
GPHY 348	Field Studies in Geography	
GPHY 378	Preceptorship in Geography	
GPHY 385	Field Techniques	
GPHY 421	Sustainable Cities	
GPHY 432	Human Role Environmental Change	
GPHY 433	Community Resilience	
GPHY 434	Food and Famine	
GPHY 438	Mountain Field Study	
GPHY 444	High Asia	
GPHY 465	Planning Principles & Processes	
GPHY 466	Environmental Planning	
GPHY 468	Community & Regional Analysis	
GPHY 469	Planning & Analysis Laboratory	
GPHY 481	Advanced Cartographic Design	
GPHY 482	Spatial Analysis & GIS	
GPHY 485	Internet GIS	
GPHY 486	Transport, Planning & GIS	
GPHY 487	Remote Sensing/Raster GIS	
GPHY 488	Applications of GIS	
GPHY 489	Cartography/GIS Laboratory	
GPHY 497	Workshop in Teaching Geography	

Total Hours	9

Minimum Required Grade: C-

Psychology

Note: PSYX 191,PSYX 192, PSYX 290, PSYX 291, PSYX 292, PSYX 390, PSYX 391, PSYX 392, andPSYX 491 may apply to this requirement depending on the course content.

Course List		
CODE	**TITLE**	**HOURS**
Complete 9 credits of the following courses:		9
PSYX 100S	Intro to Psychology	
PSYX 105	Careers in Psychology	
PSYX 120	Introduction to Psychological Research Methods	
PSYX 161S	Fund of Organizational Psych	
PSYX 222	Psychological Statistics	
PSYX 230	Developmental Psychology	
PSYX 233	Fund of Psychology of Aging	
PSYX 238	Adolescent Psychology	
PSYX 240	Fund of Abnormal Psychology	
PSYX 250N	Fund of Biological Psychology	
PSYX 270	Fund Psychology of Learning	
PSYX 280	Fund of Memory and Cognition	
PSYX 320	Advanced Psychological Research Methods	
PSYX 340	Abnormal Psychology	
PSYX 345	Child & Adolescent Psych Disorders	
PSYX 348	Psychology of Family Violence	
PSYX 352	Comparative Psychology	
PSYX 356	Human Neuropsychology	
PSYX 360	Social Psychology	
PSYX 362	Multicultural Psychology	
PSYX 376	Principles of Cognitive Behavioral Modification	
PSYX 377	Personalized Student Instr	
PSYX 378	Intro to Clinical Psychology	
PSYX 385	Psychology of Personality	
PSYX 400	History & System in Psychology	
COUN 485	Counseling Theories	
Total Hours		9

Minimum Required Grade: C-

Sociology

Note: SOCI 191, SOCI 291, SOCI 391, SOCI 491, and SOCI 492 may apply to this requirement depending on the course content.

Course List

CODE	TITLE	HOURS
Complete 9 credits of the following courses:		9
SOCI 101S	Introduction to Sociology	
SOCI 130S	Soc of Alternative Religions	
SOCI 202	Social Statistics	
SOCI 211S	Introduction to Criminology	
SOCI 212S	Social Issues Southeast Asia	
SOCI 220S	Race, Gender & Class	
SOCI 221	Criminal Justice System	
SOCI 260S	Introduction to Juvenile Delinquency	
SOCI 270	Intro Development Sociology	
SOCI 275S	Gender and Society	
SOCI 306	Sociology of Work	
SOCI 312	Criminal Adjudication	
SOCI 318	Sociological Research Methods	
SOCI 325	Social Stratification	
SOCI 332	Sociology of the Family	
SOCI 335	Juvenile Justice System	
SOCI 345	Sociology of Organizations	
SOCI 346	Rural Sociology	
SOCI 350	The Community	
SOCI 355	Population and Society	
SOCI 362	Sociology of Law Enforcement	
SOCI 382	Soc Psych and Social Structure	
SOCI 386	Preceptorship in Sociology	
SOCI 423	Sociology of Corrections	
SOCI 435	Law and Society	
SOCI 438	Seminar in Crime & Deviance	
SOCI 441	Capstone: Inequal and Soc Just	
SOCI 442	ISJ Service Learning	
SOCI 443	Sociology of Poverty	
SOCI 455	Classical Sociological Theory	
SOCI 460	Capstone: Rural and Env Change	

SOCI 470	Environmental Sociology	
SOCI 471	Gender and Global Development	
SOCI 485	Political Sociology	
Total Hours		9

Minimum Required Grade: C-

Education Methods

Note: The EDU 497 course number is used for multiple courses. Students should register for EDU 497 Methods: 5-12 Social Studies.

Course List		
CODE	**TITLE**	**HOURS**
Complete the following course:		
EDU 497	Teaching and Assessing	4
Total Hours		4

Minimum Required Grade: C-

Secondary Teaching Licensure

Note: For endorsement to teach social studies broadfield, a student also must gain admission to the Teacher Education Program and meet all the requirements for secondary teaching licensure. For more information, see the Teaching and Learning Department.

History Minor

Minor - History

College of Humanities & Sciences

Degree Specific Credits: 20

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: A minimum of 20 credits in History are required, of which at least 9 must be upper-division.

Summary

Course List		
CODE	**TITLE**	**HOURS**
Introductory History Courses		8
History Elective Courses		12
Total Hours		20

Introductory History 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 List		
CODE	**TITLE**	**HOURS**
Complete two of the following courses:		8
HSTA 101H	American History I	
or HSTA 103H	Honors American History I	
HSTA 102H	American History II	
or HSTA 104H	Honors American History II	
HSTR 101H	Western Civilization I	
or HSTR 103H	Honors Western Civilization I	
HSTR 102H	Western Civilization II	
or HSTR 104H	Honors Western Civilization II	
Total Hours		8

Minimum Required Grade: C-

History Electives

		Course List
CODE	**TITLE**	**HOURS**
Complete 12 elective credits in American, European, and/or World History, at least 9 of which must be upper-division. **Note: Students who fulfill the introductory history course requirement via an AP exam score must complete 20 elective credits.**		12
Total Hours		12

Minimum Required Grade: C-

Teaching History Track

Notes:

- This teaching track contains different/additional course requirements designed to meet state standards. Those interested in teaching in K-12 schools must complete the teaching track of a major in a teaching content area plus the Teacher Education Program through the Department of Teaching and Learning. Additional teaching areas can be added through completion of the teaching track of a major or minor in that content area.
  - Secondary Education Licensure Program
  - Licensure Degree Requirements
- To complete this teaching track, you need to contact the Teaching and Learning Department. You do not fill out a major/minor form for graduation or the major/minor/concentration section of the major change form. Approvals for this track must come from the Teaching and Learning Department.
- Tracks will not appear on your UM transcript, diploma, university lists, student data system, or university publications. They are used for advising purposes only. You do not fill out a major change for a track.
- Individuals completing the teaching track of this minor must also complete the teaching track of a major in another teaching content area.

Teaching Methods Requirement

Note: The EDU 497 course number is used for multiple courses. Students should register for EDU 497 Methods: 5-12 Social Studies.

Course List		
CODE	**TITLE**	**HOURS**
Complete the following course:		
EDU 497	Teaching and Assessing	4
Total Hours		4

Minimum Required Grade: C-

Secondary Teaching Licensure

Note: For endorsement to teach history, a student also must gain admission to the Teacher Education Program and meet all the requirements for secondary teaching licensure. For more information, see the Teaching and Learning Department.

Linguistics

- Overview
- Programs

Mizuki Miyashita, Program Director

Linguistics is the scientific study of language. The BA in linguistics is appropriate for any student who is interested in science or language. Students are introduced to core areas of linguistics (the structure of speech sounds, words, and sentences) as well as a broad range of related topics including language use, development, variation, change, and endangerment. The emphasis throughout is on developing strong data-analysis and critical-reasoning skills. Recommended areas of study in addition to linguistics are World Languages and Cultures, Anthropology, CSD, English, Communication Studies, Sociology, Education, Information Technology, Environmental Science, Political Science, and Psychology.

Undergraduate

- Linguistics B.A.
- English as a Second Language Certificate

Undergraduate Minors

- Linguistics Minor

University Of Montana

Linguistics B.A.

Bachelor of Arts - Linguistics

College of Humanities & Sciences

Degree Specific Credits: 35-37

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

Course List		
CODE	**TITLE**	**HOURS**
Required Core Courses		18
Required Seminar		3
Language Requirement		8-10
Linguistics Electives		6
Total Hours		35-37

Required Core Courses

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
LING 270S	Intro to Linguistics	3
LING 375X	Linguistic Ecology and Language Endangerment	3
LING 470	Linguistic Analysis	3
LING 471	Phonetics and Phonology	3
LING 472	Syntax	3
LING 489	Morphology	3
Total Hours		18

Minimum Required Grade: C-

Required Seminar

Course List		
CODE	**TITLE**	**HOURS**
Complete the following course:		
LING 494	Seminar	3
Total Hours		3

Minimum Required Grade: C-

Language Requirement

Course List		
CODE	**TITLE**	**HOURS**
Complete 8-10 credits (two semesters) of language courses beyond the General Education requirement.		8-10

Minimum Required Grade: C-

Linguistics Electives

		Course List
CODE	**TITLE**	**HOURS**
Complete two of the following courses:		6
CSD 210	Speech & Language Development	
LING 473	Language and Culture	
LING 474	Historical Linguistics	
LING 475	Linguistic Field Methods	
LING 477	Bilingualism	
LING 478	Learner Language	
LING 484	NA Indigenous Lang & Ling	
One of the above LING courses may be substituted with one of the following:		
ANTY 476	Methods for Native Languages	
MCLG 410	Methods Teaching Foreign Language	
SPNS 305	Spanish Phonetics	
SPNS 400	Introduction to Spanish Linguistics	
Total Hours		6

Minimum Required Grade: C-

English as a Second Language Certificate < University of Montana

English as a Second Language Certificate

Post-secondary Certificate - English as a Second Language

College of Humanities & Sciences

Degree Specific Credits: 22

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: This certificate is issued by the University upon the recommendation of the Linguistics Program and the Faculty Senate.

Summary

CODE	TITLE	HOURS
Core Courses		16
Required Courses		
Core Options		
Elective Courses		6
Total Hours		22

Course List

Core Courses

Rule: Must complete the following subcategories. 16 total credits required.

Required Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
LING 470	Linguistic Analysis	3
LING 471	Phonetics and Phonology	3
LING 472	Syntax	3
LING 480	Tchg Engl as For Lang	3
LING 495	ESL Practicum (may be taken on a credit/no credit basis)	1
Total Hours		13

Course List

Minimum Required Grade: C-

Core Options

CODE	TITLE	HOURS
Complete one of the following courses:		3
LING 477	Bilingualism	
LING 478	Learner Language	
Total Hours		3

Course List

Minimum Required Grade: C-

Elective Courses

CODE	TITLE	HOURS
Complete two of the following courses:		6
LING 473	Language and Culture	
LING 477	Bilingualism (if not taken as a core course)	
LING 478	Learner Language (if not taken as a core course)	
LING 489	Morphology	
Total Hours		6

Course List

Minimum Required Grade: C-

Linguistics Minor < University of Montana

Linguistics Minor

Minor - Linguistics

College of Humanities & Sciences

Degree Specific Credits: 18

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: To earn a Minor in Linguistics, students must complete 18 credits beyond their major degree requirements.

Summary

CODE	TITLE	HOURS
Upper-Division Core Courses		9
Core Course		
Additional Core Courses		
Elective Courses		9
Total Hours		18

Course List

Upper-Division Core Courses

Rule: Complete the following subcategories of courses. 9 total credits required.

Core Course

CODE	TITLE	HOURS
Complete the following course:		
LING 470	Linguistic Analysis	3
Total Hours		3

Course List

Minimum Required Grade: C-

Additional Core Courses

CODE	TITLE	HOURS
Complete two of the following courses:		6
LING 471	Phonetics and Phonology	
LING 472	Syntax	
LING 489	Morphology	
Total Hours		6

Course List

Minimum Required Grade: C-

Elective Courses

Note: Please note: In earning this minor, 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.

CODE	TITLE	HOURS
Complete three of the following courses:		9
LING 270S	Intro to Linguistics	
or LING 465	Structure & History of English	
LING 375X	Linguistic Ecology and Language Endangerment	
LING 465	Structure & History of English	
LING 471	Phonetics and Phonology (if not taken as a core course)	
LING 472	Syntax (if not taken as a core course)	
LING 473	Language and Culture	
LING 474	Historical Linguistics	
LING 475	Linguistic Field Methods	
LING 477	Bilingualism	
LING 478	Learner Language	
LING 484	NA Indigenous Lang & Ling	
LING 489	Morphology (if not taken as a core course)	
Total Hours		9

Course List

Minimum Required Grade: C-

Mathematical Sciences Department < University of Montana

Mathematical Sciences Department

- Overview
- Programs

Emily Stone, Chair

Mathematics is studied both as a tool and for its own sake. Its usefulness for the sciences and in decision-making processes makes it an indispensable part of many curricula. Mathematics is challenging, fascinating, and beautiful; and it is also appreciated by many who seek primarily to use mathematics as a tool.

The Department of Mathematical Sciences provides students with the training in mathematics and statistics necessary for success in their careers. The instructional mission of the department has three components: we offer general education quantitative literacy courses; we provide the mathematical background for students preparing for careers in other fields; and we offer a quality program of mathematical specialization at all levels, ranging from an undergraduate minor to bachelor s, master s, and doctoral degrees in a variety of fields, including teacher preparation.

Mathematics more and more becomes an integral part of high-tech industries; many technological, political, and social processes have become so complex that they could not be really understood without a mathematicians involvement. Our graduates are prepared for exciting and fulfilling careers in academia, industry, government, and other areas. In addition to educational activities, our faculty are committed to excellence both in research in the mathematical sciences and in service to the citizens of Montana and the wider community.

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 M 171 during the freshman year (preferably during the first semester at the university).

Undergraduate

- Mathematics B.A.
- Mathematics B.A., Applied Mathematics Concentration
- Mathematics B.A., Combinatorics and Optimization Concentration
- Mathematics B.A., Mathematics Education Concentration
- Mathematics B.A., Pure Mathematics Concentration
- Mathematics B.A., Statistics Concentration
- Mathematical Sciences-Computer Science B.S.

Undergraduate Minors

- Mathematics

Mathematical Sciences-Computer Science B.S. (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 Science-Computer Science

College of Humanities & Sciences

Degree Specific Credits: 72-73

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

Course List		
CODE	**TITLE**	**HOURS**
Mathematical Sciences		31
Computer Science		29
Science Requirement		9-10
Biology		
Chemistry		
Physics		
Public Speaking Requirement		3
Total Hours		72-73

Mathematical Sciences

Rule: Complete the following subcategories. 31 total credits required.

Mathematical Sciences Core

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
M 171	Calculus I	4
or M 181	Honors Calculus I	
M 172	Calculus II	4
or M 182	Honors Calculus II	
M 221	Introduction to Linear Algebra	4
M 273	Multivariable Calculus	4
M 307	Introduction to Abstract Mathematics	3
or M 225	Introduction to Discrete Mathematics	
Total Hours		19

Minimum Required Grade: C-

Mathematical Sciences Electives

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, STAT 452).

Course List		
CODE	**TITLE**	**HOURS**
Complete 12 credits of the following courses:		12
M 311	Ordinary Differential Equations and Systems	
M 325	Discrete Mathematics	
M 326	Number Theory	
M 361	Discrete Optimization	
M 362	Linear Optimization	
M 381	Advanced Calculus I	
M 412	Partial Differential Equations	
M 414	Deterministic Models	
M 429	History of Mathematics	
M 431	Abstract Algebra I	
M 432	Abstract Algebra II	
M 439	Euclidean and NonEuclidean Geometry	
M 440	Numerical Analysis	
M 445	Statistical, Dynamical, and Computational Modeling	
M 461	Data Science Analytics	
M 462	Theoretical Basics of Big Data Analytics and Real Time Computation Algorithms	
M 472	Introduction to Complex Analysis	
M 473	Introduction to Real Analysis	
M 485	Graph Theory	
STAT 341	Introduction to Probability and Statistics	
STAT 421	Probability Theory	
STAT 422	Mathematical Statistics	
STAT 451	Statistical Methods I	
STAT 452	Statistical Methods II	
Total Hours		12

Minimum Required Grade: C-

Computer Science

Rule: Complete the following subcategories. 30 total credits required.

Computer Science Core

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
CSCI 106	Careers in Computer Science	1
CSCI 135	Fund of Computer Science I	3
CSCI 136	Fund of Computer Science II	3
CSCI 205	Programming with C/C++	3
CSCI 232	Data Structures and Algorithms	4
CSCI 332	Design/Analysis of Algorithms	3
CSCI 361	Computer Architecture	3
Total Hours		20

Minimum Required Grade: C-

Computer Science Electives

Note:

1. A total of at most three of the nine credits of Computer Science Electives may be in CSCI 398 or CSCI 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, STAT 452).

Course List		
CODE	**TITLE**	**HOURS**
Complete 9 credits of the following courses:		9
CSCI 315E	Computers, Ethics, and Society	
CSCI 323	Software Science	
CSCI 340	Database Design	
CSCI 390	Research	
CSCI 391	Special Topics	
CSCI 394	Seminar	
CSCI 398	Internship	
CSCI 411	Advanced Web Programming	
CSCI 412	Game and Mobile App	
CSCI 426	Adv Prgrmng Theory/Practice I	
CSCI 427	Adv Prgrmng Theory/Practice II	
CSCI 441	Computer Graphics Programming	
CSCI 443	User Interface Design	
CSCI 444	Data Visualization	
CSCI 446	Artificial Intelligence	
CSCI 447	Machine Learning	
CSCI 448	Pattern Recognition	
CSCI 451	Computational Biology	
CSCI 460	Operating Systems	
CSCI 464	Applications of Mining Big Data	
CSCI 466	Networks	
CSCI 477	Simulation	
CSCI 480	Applied Parallel Computing Techniques	
CSCI 490	Research	
CSCI 491	Special Topics	
CSCI 494	Seminar	
CSCI 498	Internship	
CSCI 499	Senior Thesis/Capstone	
Total Hours		9

Minimum Required Grade: C-

Science Requirement

Rule: Complete the course work from 1 of the following subcategories. 9-10 total credits required.

Biology

Course List		
CODE	**TITLE**	**HOURS**
If you choose biology, complete all of the following course s:		
BIOB 160N	Principles of Living Systems	3
BIOB 161N	Prncpls of Living Systems Lab	1
BIOB 170N	Princpls Biological Diversity	3
BIOB 171N	Princpls Biological Dvrsty Lab	2
Total Hours		9

Minimum Required Grade: C-

Chemistry

Course List		
CODE	**TITLE**	**HOURS**
If you choose chemistry, complete all of the following courses:		
CHMY 141N & CHMY 142N	College Chemistry I and College Chemistry I Lab	5
CHMY 143N & CHMY 144N	College Chemistry II and College Chemistry II Lab	5
Total Hours		10

Minimum Required Grade: C-

Physics

Course List		
CODE	**TITLE**	**HOURS**
If you choose physics, complete all of the following courses:		
PHSX 215N	Fund of Physics w/Calc I	4
PHSX 216N	Physics Laboratory I w/Calc	1
PHSX 217N	Fund of Physics w/Calc II	4
PHSX 218N	Physics Laboratory II w/Calc	1
Total Hours		10

Minimum Required Grade: C-

Public Speaking Requirement

Course List		
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		
COMX 111A	Introduction to Public Speaking	3
or COMX 242	Argumentation	
Total Hours		3

Minimum Required Grade: C-

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. Note that the suggested curricula do not include an advanced College Writing Course.

Applied Math Scientific Programming

Course List		
CODE	**TITLE**	**HOURS**
M 311	Ordinary Differential Equations and Systems	3
M 412	Partial Differential Equations	3
M 414	Deterministic Models	3
Select one of the following:		3-4
M 381	Advanced Calculus I	
M 440	Numerical Analysis	
M 472	Introduction to Complex Analysis	
M 473	Introduction to Real Analysis	
STAT 341	Introduction to Probability and Statistics	
Select three of the following:		9
CSCI 441	Computer Graphics Programming	
CSCI 444	Data Visualization	
CSCI 460	Operating Systems	
CSCI 477	Simulation	
Total Hours		21-22

Combinatorics and Optimization Artificial Intelligence

Course List		
CODE	**TITLE**	**HOURS**
M 361	Discrete Optimization	3
M 362	Linear Optimization	3
Select two of the following:		6
M 325	Discrete Mathematics	
M 414	Deterministic Models	
M 485	Graph Theory	
STAT 341	Introduction to Probability and Statistics	
CSCI 446	Artificial Intelligence	3
CSCI 447	Machine Learning	3
CSCI 460	Operating Systems	3
Total Hours		21

Data Science (Big Data Analytics)

Course List		
CODE	**TITLE**	**HOURS**
M 461	Data Science Analytics	3
M 462	Theoretical Basics of Big Data Analytics and Real Time Computation Algorithms	3
STAT 341	Introduction to Probability and Statistics	3
STAT 451	Statistical Methods I	3
STAT 452	Statistical Methods II	3
Select three of the following:		9
CSCI 444	Data Visualization	
CSCI 447	Machine Learning	
CSCI 448	Pattern Recognition	
CSCI 464	Applications of Mining Big Data	
CSCI 480	Applied Parallel Computing Techniques	
Total Hours		24

Statistics Machine Learning

Course List		
CODE	**TITLE**	**HOURS**
STAT 341	Introduction to Probability and Statistics	3
STAT 421	Probability Theory	3
Select two of the following:		6
M 325	Discrete Mathematics	
M 362	Linear Optimization	
M 485	Graph Theory	
STAT 422	Mathematical Statistics	
Select three of the following:		9
CSCI 340	Database Design	
CSCI 444	Data Visualization	
CSCI 446	Artificial Intelligence	
CSCI 447	Machine Learning	
CSCI 451	Computational Biology	
Total Hours		21

Algebra Analysis

Course List		
CODE	**TITLE**	**HOURS**
M 381	Advanced Calculus I	3
M 431	Abstract Algebra I	4
Select two of the following:		7-8
M 326	Number Theory	
M 432	Abstract Algebra II	
M 472	Introduction to Complex Analysis	
M 473	Introduction to Real Analysis	
CSCI 426	Adv Prgrmng Theory/Practice I	3
CSCI 460	Operating Systems	3
CSCI Elective		3
Total Hours		23-24

Mathematics B.A.

This degree is the BA in Mathematics without a concentration. Students can add one or more of the concentrations in Applied Mathematics, Combinatorics & Optimization, Pure Mathematics, or Statistics to this degree by fulfilling the respective Concentration Requirements (achieved by taking specific Upper-Division Elective Courses). Typically, students declare one of these four concentrations during their sophomore or junior year. Note that the requirements for the Mathematics Education concentration are extensive and differ substantially from the requirements for the other concentrations. Students interested in Mathematics Education are encouraged to declare this concentration as early as possible, preferably during their first year at UM.

Bachelor of Arts - Mathematics

College of Humanities & Sciences

Degree Specific Credits: 67

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note on degree specific credits: 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.

Note on the GPA requirement:

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.)

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

Course List		
CODE	**TITLE**	**HOURS**
Mathematics Core Courses		23
Upper-Division Mathematics Requirement		23
Upper-Division Elective Courses		
Science Requirement		18
Foreign Language/Computer Science Requirement		3
Total Hours		67

Mathematics Core Courses

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
M 171	Calculus I	4
or M 181	Honors Calculus I	
M 172	Calculus II	4
or M 182	Honors Calculus II	
M 210	Introduction to Mathematical Software	3
M 221	Introduction to Linear Algebra	4
M 273	Multivariable Calculus	4
M 300	Undergraduate Mathematics Seminar	1
M 307	Introduction to Abstract Mathematics	3
Total Hours		23

Minimum Required Grade: C-

Upper-Division Mathematics Requirement

Rule: Complete 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-

Upper-Division Elective Courses

Note:

1. Students completing a minor in another subject or a second major need take only 6 courses.
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.
4. In addition to counting towards this requirement, M 429 (History of Mathematics) is also an advanced college writing course. Most Mathematics majors use M 429 to meet the advanced college writing general education requirement.

Course List		
CODE	**TITLE**	**HOURS**
Complete 7 courses from the following list; at least 3 of them must be at the 400 level		
M 301	Teaching Mathematics with Technology	
M 311	Ordinary Differential Equations and Systems	
M 325	Discrete Mathematics	
M 326	Number Theory	
M 361	Discrete Optimization	
M 362	Linear Optimization	
M 381	Advanced Calculus I	
M 412	Partial Differential Equations	
M 414	Deterministic Models	
M 429	History of Mathematics	
M 431	Abstract Algebra I	
M 432	Abstract Algebra II	
M 439	Euclidean and NonEuclidean Geometry	
M 440	Numerical Analysis	
M 445	Statistical, Dynamical, and Computational Modeling	
M 461	Data Science Analytics	
M 462	Theoretical Basics of Big Data Analytics and Real Time Computation Algorithms	
M 472	Introduction to Complex Analysis	
M 473	Introduction to Real Analysis	
M 485	Graph Theory	
STAT 341	Introduction to Probability and Statistics	
STAT 421	Probability Theory	
STAT 422	Mathematical Statistics	
STAT 452	Statistical Methods II	

Minimum Required Grade: C-

Upper-Division Elective Computer Labs

Rule: Computer labs from the following list are optional; if taken (0-2 credits), they count toward the total number of credits required for the Upper-Division Mathematics Requirement.

Course List		
CODE	**TITLE**	**HOURS**
M 317	Ordinary Differential Equations Computer Lab	1
M 363	Linear Optimization Laboratory	1
M 418	Partial Differential Equations Computer Lab	1
STAT 457	Computer Data Analysis I	1
STAT 458	Computer Data Analysis II	1

Minimum Required Grade: C-

Science Requirement

Rule: Complete 18 credits in at most 3 areas selected from astronomy (ASTR), biology (BIO*), chemistry (CHMY), computer science (CSCI, except CSCI TR*), economics (ECNS), forestry (FORS, WILD), geosciences (GEO), management information systems (BMIS), and physics (PHSX).

Note:

1. Students completing a minor (in another subject) or a second major are exempt from this requirement.
2. Transfer courses listed on the transcript as CSCI TR* may include course work in other areas such as Computer Applications (CAPP) and therefore do not count towards this requirement unless a student successfully petitions the Department of Mathematical Sciences.

Minimum Required Grade: C-

Language/Computer Science Requirement

Rule: Either complete the General Education Requirement Group III: Modern and Classical Language or take one course from the following list.

Note: Students completing a second major are exempt from this requirement.

Course List		
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		3
CSCI 100	Intro to Programming	
CSCI 126	Computation in the Sciences with Calculus	
CSCI 135	Fund of Computer Science I	
CSCI 136	Fund of Computer Science II	
Total Hours		3

Minimum Required Grade: C-

Mathematics B.A. - Applied Mathematics

This degree concentration differs from the BA in Mathematics without a concentration only in the Concentration Requirements.

Bachelor of Arts - Mathematics; Applied Mathematics Concentration

College of Humanities & Sciences

Degree Specific Credits: 67

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note on degree specific credits: 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.

Note on the GPA requirement:

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.)

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

Course List		
CODE	**TITLE**	**HOURS**
Mathematics Core Courses		23
Upper-Division Mathematics Requirement		23
Upper-Division Elective Courses		
Science Requirement		18
Foreign Language/Computer Science Requirement		3
Requirements for the Applied Mathematics Concentration (usually fulfilled with courses that count towards the Upper-Division Mathematics Requirement)		
Total Hours		67

Mathematics Core Courses

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses.		
M 171	Calculus I	4
or M 181	Honors Calculus I	
M 172	Calculus II	4
or M 182	Honors Calculus II	
M 210	Introduction to Mathematical Software	3
M 221	Introduction to Linear Algebra	4
M 273	Multivariable Calculus	4
M 300	Undergraduate Mathematics Seminar	1
M 307	Introduction to Abstract Mathematics	3
Total Hours		23

Minimum Required Grade: C-

Upper-Division Mathematics Requirement

Rule: Complete 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.

Upper-Division Elective Courses

Note:

1. Students completing a minor in another subject or a second major need take only 6 courses.
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.
4. In addition to counting towards this requirement, M 429 (History of Mathematics) is also an advanced college writing course. Most Mathematics majors use M 429 to meet the advanced college writing general education requirement.

Course List		
CODE	**TITLE**	**HOURS**
Complete 7 courses from the following list; at least 3 of them must be at the 400 level:		
M 301	Teaching Mathematics with Technology	
M 311	Ordinary Differential Equations and Systems	
M 325	Discrete Mathematics	
M 326	Number Theory	
M 361	Discrete Optimization	
M 362	Linear Optimization	
M 381	Advanced Calculus I	
M 412	Partial Differential Equations	
M 414	Deterministic Models	
M 429	History of Mathematics	
M 431	Abstract Algebra I	
M 432	Abstract Algebra II	
M 439	Euclidean and NonEuclidean Geometry	
M 440	Numerical Analysis	
M 445	Statistical, Dynamical, and Computational Modeling	
M 461	Data Science Analytics	
M 462	Theoretical Basics of Big Data Analytics and Real Time Computation Algorithms	
M 472	Introduction to Complex Analysis	
M 473	Introduction to Real Analysis	
M 485	Graph Theory	
STAT 341	Introduction to Probability and Statistics	
STAT 421	Probability Theory	
STAT 422	Mathematical Statistics	
STAT 452	Statistical Methods II	

Minimum Required Grade: C-

Upper-Division Elective Computer Labs

Rule: Computer labs from the following list are optional; if taken (0-2 credits), they count toward the total number of credits required for the Upper-Division Mathematics Requirement.

Course List		
CODE	**TITLE**	**HOURS**
M 317	Ordinary Differential Equations Computer Lab	1
M 363	Linear Optimization Laboratory	1
M 418	Partial Differential Equations Computer Lab	1
STAT 457	Computer Data Analysis I	1
STAT 458	Computer Data Analysis II	1

Minimum Required Grade: C-

Science Requirement

Rule: Complete 18 credits in at most 3 areas selected from Astronomy (ASTR), Biology (BIO*), Chemistry (CHMY), Computer Science (CSCI, except CSCI transfer work), Economics (ECNS), Forestry (FORS, WILD), Geosciences (GEO), Management Information Systems (BMIS), and Physics (PHSX).

Note:

1. Students completing a minor (in another subject) or a second major are exempt from this requirement.
2. Transfer courses listed on the transcript as CSCI TR* may include course work in other areas such as Computer Applications (CAPP) and therefore do not count towards this requirement unless a student successfully petitions the Department of Mathematical Sciences.

Minimum Required Grade: C-

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 List		
CODE	**TITLE**	**HOURS**
Complete one of the following:		3
CSCI 100	Intro to Programming	
CSCI 126	Computation in the Sciences with Calculus	
CSCI 135	Fund of Computer Science I	
CSCI 136	Fund of Computer Science II	
Total Hours		3

Minimum Required Grade: C-

Requirements for the Applied Mathematics Concentration

Rule: Complete the following subcategories. 13-14 total credits required.

Applied Mathematics Option: Core Courses

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
M 311	Ordinary Differential Equations and Systems	3
M 412	Partial Differential Equations	3
Total Hours		6

Minimum Required Grade: C-

Applied Mathematics Option: Elective Courses

Note: In addition, M 381 and M 485 are also recommended.

Course List		
CODE	**TITLE**	**HOURS**
Complete two of the following courses:		7-8
M 414	Deterministic Models	
M 440	Numerical Analysis	
M 445	Statistical, Dynamical, and Computational Modeling	
M 472	Introduction to Complex Analysis	
Total Hours		7-8

Minimum Required Grade: C-

Mathematics B.A. - Combinatorics and Optimization

This degree concentration differs from the BA in Mathematics without a concentration only in the Concentration Requirements.

Bachelor of Arts - Mathematics; Combinatorics & Optimization Concentration

College of Humanities & Sciences

Degree Specific Credits: 67

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note on degree specific credits: 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.

Note on the GPA requirement:

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.)

General Education Requirements

Summary

Course List		
CODE	**TITLE**	**HOURS**
Mathematics Core Courses		23
Upper-Division Mathematics Requirement		23
Upper-Division Elective Courses		
Science Requirement		18
Foreign Language/Computer Science Requirement		3
Requirements for the Combinatorics & Optimization Concentration (usually fulfilled with courses that count towards the Upper-Division Mathematics Requirement)		
Total Hours		67

Mathematics Core Courses

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
M 171	Calculus I	4
or M 181	Honors Calculus I	
M 172	Calculus II	4
or M 182	Honors Calculus II	
M 210	Introduction to Mathematical Software	3
M 221	Introduction to Linear Algebra	4
M 273	Multivariable Calculus	4
M 300	Undergraduate Mathematics Seminar	1
M 307	Introduction to Abstract Mathematics	3
Total Hours		23

Minimum Required Grade: C-

Upper-Division Mathematics Requirement

Rule: Complete 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.

Upper-Division Elective Courses

Note:

1. Students completing a minor in another subject or a second major need take only 6 courses.
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.
4. In addition to counting towards this requirement, M 429 (History of Mathematics) is also an advanced college writing course. Most Mathematics majors use M 429 to meet the advanced college writing general education requirement.

Course List		
CODE	**TITLE**	**HOURS**
Complete 7 courses from the following list; at least 3 of them must be at the 400 level:		
M 301	Teaching Mathematics with Technology	
M 311	Ordinary Differential Equations and Systems	
M 325	Discrete Mathematics	
M 326	Number Theory	
M 361	Discrete Optimization	
M 362	Linear Optimization	
M 381	Advanced Calculus I	
M 412	Partial Differential Equations	
M 414	Deterministic Models	
M 429	History of Mathematics	
M 431	Abstract Algebra I	
M 432	Abstract Algebra II	
M 439	Euclidean and NonEuclidean Geometry	
M 440	Numerical Analysis	
M 445	Statistical, Dynamical, and Computational Modeling	
M 461	Data Science Analytics	
M 462	Theoretical Basics of Big Data Analytics and Real Time Computation Algorithms	
M 472	Introduction to Complex Analysis	
M 473	Introduction to Real Analysis	
M 485	Graph Theory	
STAT 341	Introduction to Probability and Statistics	
STAT 421	Probability Theory	
STAT 422	Mathematical Statistics	
STAT 452	Statistical Methods II	

Minimum Required Grade: C-

Upper-Division Elective Computer Labs

Rule: Computer labs from the following list are optional; if taken (0-2 credits), they count toward the total number of credits required for the Upper-Division Mathematics Requirement.

Course List		
CODE	**TITLE**	**HOURS**
M 317	Ordinary Differential Equations Computer Lab	1
M 363	Linear Optimization Laboratory	1
M 418	Partial Differential Equations Computer Lab	1
STAT 457	Computer Data Analysis I	1
STAT 458	Computer Data Analysis II	1

Minimum Required Grade: C-

Science Requirement

Rule: Take 18 credits in at most 3 areas selected from astronomy (ASTR), biology (BIO*), chemistry (CHMY), computer science (CSCI, except CSCI TR*), economics (ECNS), forestry (FORS, WILD), geosciences (GEO), management information systems (BMIS), and physics (PHSX).

Note:

1. Students completing a minor (in another subject) or a second major are exempt from this requirement.
2. Transfer courses listed on the transcript as CSCI TR* may include course work in other areas such as Computer Applications (CAPP) and therefore do not count towards this requirement unless a student successfully petitions the Department of Mathematical Sciences.

Minimum Required Grade: C-

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 List		
CODE	**TITLE**	**HOURS**
Complete one of the following:		3
CSCI 100	Intro to Programming	
CSCI 126	Computation in the Sciences with Calculus	
CSCI 135	Fund of Computer Science I	
CSCI 136	Fund of Computer Science II	
Total Hours		3

Minimum Required Grade: C-

Requirements for the Combinatorics & Optimization Concentration

Rule: Complete the following subcategories.12-13 total credits required.

Combinatorics & Optimization Option: Core Courses

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
M 361	Discrete Optimization	3
M 362	Linear Optimization	3
M 485	Graph Theory	3
Total Hours		9

Minimum Required Grade: C-

Combinatorics & Optimization Concentration: Elective Courses

Course List		
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		3-4
CSCI 332	Design/Analysis of Algorithms	
M 414	Deterministic Models	
M 440	Numerical Analysis	
STAT 341	Introduction to Probability and Statistics	
Total Hours		3-4

Minimum Required Grade: C-

Mathematics B.A. - 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 Education Program through the Department of Teaching and Learning. Individuals must complete the teaching track within that degree program, which may contain different course requirements than the non-teaching track 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 Concentration

College of Humanities & Sciences

Degree Specific Credits: 67-68

Required Cumulative GPA: 2.5

Catalog Year: 2019-2020

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.

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

Course List		
CODE	**TITLE**	**HOURS**
Mathematical Sciences Courses Required for the Mathematics Education Concentration		41-42
Core Courses		
Elective Course		
Mathematics Teaching Methods Course		
Student Teaching Requirement for the Mathematics Education Concentration		14
Science Requirement for the Mathematics Education Concentration		12
Secondary Teaching Licensure		
Total Hours		67-68

Mathematical Sciences Courses Required for the Mathematics Education Concentration

Rule: The courses in this category must be completed with a cumulative GPA of at least 2.75.

Core 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 Advanced College Writing Requirement for this degree.
3. STAT 451 can be substituted for STAT 341, if STAT 451 is not selected as the elective course.

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
M 171	Calculus I	4
or M 181	Honors Calculus I	
M 172	Calculus II	4
or M 182	Honors Calculus II	
M 221	Introduction to Linear Algebra	4
M 301	Teaching Mathematics with Technology	3
M 307	Introduction to Abstract Mathematics	3
M 326	Number Theory	3
M 429	History of Mathematics	3
M 431	Abstract Algebra I	4
M 439	Euclidean and NonEuclidean Geometry	3
STAT 341	Introduction to Probability and Statistics	3
or STAT 451	Statistical Methods I	
Total Hours		34

Minimum Required Grade: C-

Elective Course

Course List		
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		3-4
M 273	Multivariable Calculus	
M 311	Ordinary Differential Equations and Systems	
M 325	Discrete Mathematics	
M 361	Discrete Optimization	
M 362	Linear Optimization	
M 381	Advanced Calculus I	
M 412	Partial Differential Equations	
M 414	Deterministic Models	
M 432	Abstract Algebra II	
M 440	Numerical Analysis	
M 445	Statistical, Dynamical, and Computational Modeling	
M 461	Data Science Analytics	
M 462	Theoretical Basics of Big Data Analytics and Real Time Computation Algorithms	
M 472	Introduction to Complex Analysis	
M 473	Introduction to Real Analysis	
M 485	Graph Theory	
STAT 421	Probability Theory	
STAT 422	Mathematical Statistics	
STAT 451	Statistical Methods I	
STAT 452	Statistical Methods II	
Total Hours		3-4

Minimum Required Grade: C-

Mathematics Teaching Methods 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 concentration.

Course List		
CODE	**TITLE**	**HOURS**
Complete the following course:		
EDU 497	Teaching and Assessing	4
Total Hours		4

Minimum Required Grade: C-

Student Teaching Requirement for the Mathematics Education Concentration

Course List		
CODE	**TITLE**	**HOURS**
Complete the following course:		14
EDU 495	Student Teaching	
Total Hours		14

Minimum Required Grade: C-

Science Requirement for the Mathematics Education Concentration

Rule: Complete 12 credits in at most two areas selected from astronomy (ASTR), biology (BIO*), chemistry (CHMY), computer science (CSCI, except CSCI TR*), economics (ECNS), forestry (FORS, WILD), geosciences (GEO), management information systems (BMIS), and physics (PHSX).

Note:

1. Students completing a teaching minor (in another subject) or a second major are exempt from this requirement.
2. Transfer courses listed on the transcript as CSCI TR* may include course work in other areas such as Computer Applications (CAPP) and therefore do not count towards this requirement unless a student successfully petitions the Department of Mathematical Sciences.

Minimum Required Grade: C-

Secondary Teaching Licensure

Note: For endorsement to teach mathematics, a student also must gain admission to the Teacher Education Program and meet all the requirements for secondary teaching licensure. For more information, see the Teaching and Learning Department.

Mathematics B.A. - Pure Mathematics

This degree concentration differs from the BA in Mathematics without a concentration only in the Concentration Requirements.

Bachelor of Arts - Mathematics; Pure Mathematics Concentration

College of Humanities & Sciences

Degree Specific Credits: 68

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note on degree specific credits: 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.

Note on the GPA requirement:

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.)

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

Course List		
CODE	**TITLE**	**HOURS**
Mathematics Core Courses		23
Upper-Division Mathematics Requirement		23
Upper-Division Elective Courses		
Science Requirement		18
Foreign Language/Computer Science Requirement		3
Requirements for the Pure Mathematics Concentration (usually fulfilled with courses that count towards the Upper-Division Mathematics Requirement)		
Total Hours		67

Mathematics Core Courses

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
M 171	Calculus I	4
or M 181	Honors Calculus I	
M 172	Calculus II	4
or M 182	Honors Calculus II	
M 210	Introduction to Mathematical Software	3
M 221	Introduction to Linear Algebra	4
M 273	Multivariable Calculus	4
M 300	Undergraduate Mathematics Seminar	1
M 307	Introduction to Abstract Mathematics	3
Total Hours		23

Minimum Required Grade: C-

Upper-Division Mathematics Requirement

Rule: Complete 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-

Upper-Division Elective Courses

Note:

1. Students completing a minor in another subject or a second major need take only 6 courses.
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.
4. In addition to counting towards this requirement, M 429 (History of Mathematics) is also an advanced college writing course. Most Mathematics majors use M 429 to meet the advanced college writing general education requirement.

Course List		
CODE	**TITLE**	**HOURS**
Complete 7 courses from the following list; at least 3 of them must be at the 400 level.:		
M 301	Teaching Mathematics with Technology	
M 311	Ordinary Differential Equations and Systems	
M 325	Discrete Mathematics	
M 326	Number Theory	
M 361	Discrete Optimization	
M 362	Linear Optimization	
M 381	Advanced Calculus I	
M 412	Partial Differential Equations	
M 414	Deterministic Models	
M 429	History of Mathematics	
M 431	Abstract Algebra I	
M 432	Abstract Algebra II	
M 439	Euclidean and NonEuclidean Geometry	
M 440	Numerical Analysis	
M 445	Statistical, Dynamical, and Computational Modeling	
M 461	Data Science Analytics	
M 462	Theoretical Basics of Big Data Analytics and Real Time Computation Algorithms	
M 472	Introduction to Complex Analysis	
M 473	Introduction to Real Analysis	
M 485	Graph Theory	
STAT 341	Introduction to Probability and Statistics	
STAT 421	Probability Theory	
STAT 422	Mathematical Statistics	
STAT 452	Statistical Methods II	

Minimum Required Grade: C-

Upper-Division Elective Computer Labs

Rule: Computer labs from the following list are optional; if taken (0-2 credits), they count toward the total number of credits required for the Upper-Division Mathematics Requirement.

Course List		
CODE	**TITLE**	**HOURS**
M 317	Ordinary Differential Equations Computer Lab	1
M 363	Linear Optimization Laboratory	1
M 418	Partial Differential Equations Computer Lab	1
STAT 457	Computer Data Analysis I	1
STAT 458	Computer Data Analysis II	1

Minimum Required Grade: C-

Science Requirement

Rule: Complete 18 credits in at most 3 areas selected from astronomy (ASTR), biology (BIO*), chemistry (CHMY), computer science (CSCI, except CSCI TR*), economics (ECNS), forestry (FORS, WILD), geosciences (GEO), management information systems (BMIS), and physics (PHSX).

Note:

1. Students completing a minor (in another subject) or a second major are exempt from this requirement.
2. Transfer courses listed on the transcript as CSCI TR* may include course work in other areas such as Computer Applications (CAPP) and therefore do not count towards this requirement unless a student successfully petitions the Department of Mathematical Sciences.

Minimum Required Grade: C-

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 List		
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		3
CSCI 100	Intro to Programming	
CSCI 126	Computation in the Sciences with Calculus	
CSCI 135	Fund of Computer Science I	
CSCI 136	Fund of Computer Science II	
Total Hours		3

Minimum Required Grade: C-

Requirements for the Pure Mathematics Concentration

Course List		
CODE	**TITLE**	**HOURS**
Complete four of the following courses:		15-16
M 381	Advanced Calculus I	
M 431	Abstract Algebra I	
M 432	Abstract Algebra II	
M 472	Introduction to Complex Analysis	
M 473	Introduction to Real Analysis	
Total Hours		15-16

Minimum Required Grade: C-

Mathematics B.A. - Statistics

This degree concentration differs from the BA in Mathematics without a concentration only in the Concentration Requirements.

Bachelor of Arts - Mathematics; Statistics Concentration

College of Humanities & Sciences

Degree Specific Credits: 67

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note on degree specific credits: 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.

Note on the GPA requirement:

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.)

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

Course List		
CODE	**TITLE**	**HOURS**
Mathematics Core Courses		23
Upper-Division Mathematics Requirement		23
Upper-Division Elective Courses		
Science Requirement		18
Foreign Language/Computer Science Requirement		3
Requirements for the Statistics Concentration (usually fulfilled with courses that count towards the Upper-Division Mathematics Requirement)		
Total Hours		67

Mathematics Core Courses

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
M 171	Calculus I	4
or M 181	Honors Calculus I	
M 172	Calculus II	4
or M 182	Honors Calculus II	
M 210	Introduction to Mathematical Software	3
M 221	Introduction to Linear Algebra	4
M 273	Multivariable Calculus	4
M 300	Undergraduate Mathematics Seminar	1
M 307	Introduction to Abstract Mathematics	3
Total Hours		23

Minimum Required Grade: C-

Upper-Division Mathematics Requirement

Rule: Complete 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.

Upper-Division Elective Courses

Note:

1. Students completing a minor in another subject or a second major need take only 6 courses.
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.
4. In addition to counting towards this requirement, M 429 (History of Mathematics) is also an advanced college writing course. Most Mathematics majors use M 429 to meet the advanced college writing general education requirement.

Course List		
CODE	**TITLE**	**HOURS**
Complete 7 courses from the following list; at least 3 of them must be at the 400 level:		
M 301	Teaching Mathematics with Technology	
M 311	Ordinary Differential Equations and Systems	
M 325	Discrete Mathematics	
M 326	Number Theory	
M 361	Discrete Optimization	
M 362	Linear Optimization	
M 381	Advanced Calculus I	
M 412	Partial Differential Equations	
M 414	Deterministic Models	
M 429	History of Mathematics	
M 431	Abstract Algebra I	
M 432	Abstract Algebra II	
M 439	Euclidean and NonEuclidean Geometry	
M 440	Numerical Analysis	
M 445	Statistical, Dynamical, and Computational Modeling	
M 461	Data Science Analytics	
M 462	Theoretical Basics of Big Data Analytics and Real Time Computation Algorithms	
M 472	Introduction to Complex Analysis	
M 473	Introduction to Real Analysis	
M 485	Graph Theory	
STAT 341	Introduction to Probability and Statistics	
STAT 421	Probability Theory	
STAT 422	Mathematical Statistics	
STAT 452	Statistical Methods II	

Minimum Required Grade: C-

Upper-Division Elective Computer Labs

Rule: Computer labs from the following list are optional; if taken (0-2 credits), they count toward the total number of credits required for the Upper-Division Mathematics Requirement.

Course List		
CODE	**TITLE**	**HOURS**
M 317	Ordinary Differential Equations Computer Lab	1
M 363	Linear Optimization Laboratory	1
M 418	Partial Differential Equations Computer Lab	1
STAT 457	Computer Data Analysis I	1
STAT 458	Computer Data Analysis II	1

Minimum Required Grade: C-

Science Requirement

Rule: Complete 18 credits in at most 3 areas selected from astronomy (ASTR), biology (BIO*), chemistry (CHMY), computer science (CSCI, except CSCI TR*), economics (ECNS), forestry (FORS, WILD), geosciences (GEO), management information systems (BMIS), and physics (PHSX).

Note:

1. Students completing a minor (in another subject) or a second major are exempt from this requirement.
2. Transfer courses listed on the transcript as CSCI TR* may include course work in other areas such as Computer Applications (CAPP) and therefore do not count towards this requirement unless a student successfully petitions the Department of Mathematical Sciences.

Minimum Required Grade: C-

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 List		
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		3
CSCI 100	Intro to Programming	
CSCI 126	Computation in the Sciences with Calculus	
CSCI 135	Fund of Computer Science I	
CSCI 136	Fund of Computer Science II	
Total Hours		3

Minimum Required Grade: C-

Requirements for the Statistics Concentration

Note: Additional mathematics and statistics courses chosen with advisor.

Course List		
CODE	**TITLE**	**HOURS**
Complete four of the following courses:		12
M 461	Data Science Analytics	
M 462	Theoretical Basics of Big Data Analytics and Real Time Computation Algorithms	
STAT 341	Introduction to Probability and Statistics	
STAT 421	Probability Theory	
STAT 422	Mathematical Statistics	
STAT 452	Statistical Methods II	
Total Hours		12

Minimum Required Grade: C-

Mathematics Minor

A handout with detailed advice for Math minors, including suggested curricula, is available on the Math Department s home page.

Minor - Mathematics

College of Humanities & Sciences

Degree Specific Credits: 23

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Summary

Course List		
CODE	**TITLE**	**HOURS**
Calculus Requirement for a Minor in Mathematics		4
Elective Courses for a Minor in Mathematics		19
Total Hours		23

Calculus Requirements for a Minor in Mathematics

Notes:

1. M 172 or M 182 are recommended since they are prerequisites for many upper-division mathematics courses.
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.

Course List		
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		4
M 162	Applied Calculus	
M 172	Calculus II	
M 182	Honors Calculus II	
Total Hours		4

Minimum Required Grade: C-

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 M 115 or higher (excluding M 118). Courses must include at least three 3- or 4-credit courses at the 300 level or above (of which at least two must be taken at UM-Missoula).

Note:

1. The required Calculus course (M 162, M 172, or M 182) counts toward the 23 credits, as well as its prerequisite courses at the 100-level (e.g., M 171 or M 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 Track

Teaching Mathematics Track

Notes:

- This teaching track contains different/additional course requirements designed to meet state standards. Those interested in teaching in K-12 schools must complete the teaching track of a major in a teaching content area plus the Teacher Education Program through the Department of Teaching and Learning. Additional teaching areas can be added through completion of the teaching track of a major or minor in that content area.
    - Secondary Education Licensure Program
    - Licensure Degree Requirements
- To complete this teaching track, you need to contact the Teaching and Learning Department. You do not fill out a major/minor form for graduation or the major/minor/concentration section of the major change form. Approvals for this track must come from the Teaching and Learning Department.
- Tracks will not appear on your UM transcript, diploma, university lists, student data system, or university publications. They are used for advising purposes only. You do not fill out a major change for a track.
- Individuals completing the teaching track of this minor must also complete the teaching track of a major in another teaching content area.
- Completing this teaching track also fulfills all requirements for the Minor in Mathematics. To earn this minor, you have to declare it using the major change form and must apply for it using the relevant graduation application form. Once you graduate, completed minors are listed on the transcript.
- Additional Mathematical Sciences Courses for the Teaching Mathematics Track

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
M 171	Calculus I	4
or M 181	Honors Calculus I	
M 172	Calculus II	4
or M 182	Honors Calculus II	
M 221	Introduction to Linear Algebra	4
M 301	Teaching Mathematics with Technology	3
M 307	Introduction to Abstract Mathematics	3
M 326	Number Theory	3
M 439	Euclidean and NonEuclidean Geometry	3
STAT 341	Introduction to Probability and Statistics	3
or STAT 451	Statistical Methods I	
Total Hours		27

Minimum Required Grade: C-

Mathematics Teaching Methods 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 List		
CODE	**TITLE**	**HOURS**
Complete the following course:		
EDU 497	Teaching and Assessing	4
Total Hours		4

Minimum Required Grade: C-

Secondary Teaching Licensure

Note: For endorsement to teach mathematics, a student also must gain admission to the Teacher Education Program and meet all the requirements for secondary teaching licensure. For more information, see the Teaching and Learning Department.

Military Science < University of Montana

Military Science

- Overview
- Programs

LTC Christopher Wellman, Director

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:

1. the Basic Course and
2. 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 de fense, 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.

Undergraduate Minors

- Military Studies Minor

Military Studies Minor < University of Montana

Military Studies Minor

Minor - Military Studies

College of Humanities & Sciences

Degree Specific Credits: 33

Required Cumulative GPA: 2.5

Catalog Year: 2019-2020

Note: A total of 24 credits of MSL (Military Science Leadership) courses are allowed toward the bachelors degree for contracted students. A total of 12 credits are allowed toward the bachelors degree for non-contracted students. A minimum grade of "C" or better in all courses used toward the minor and a cumulative GPA of 2.5 for Military Science courses is required.

Summary

CODE	TITLE	HOURS
Lower-Divison Core Courses		12
Upper-Division Core Courses		12
War History Requirement		3
History/Political Science Requirement		6
Total Hours		33

Course List

Lower-Division Core Courses

Note: The department may waive these basic course requirements in the following situations:

- prior military service,
- Advanced Individual Training (AIT),
- Leader's Training Course (LTC) or
- Accelerated Cadet Commissioning Training (ACCT).

CODE	TITLE	HOURS
Complete all of the following courses:		
MSL 101	Leadership and Personal Dev	3
MSL 102	Intro to Tactical Leadership	3
MSL 201	Innovative Team Leadership	3
MSL 202	Found of Tactical Leadership	3
Total Hours		12

Course List

Minimum Required Grade: C

Upper-Division Core Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
MSL 301	Adaptive Team Leadership	3
MSL 302	Applied Team Leadership	3
MSL 401	Adaptive Leadership	3
MSL 402	Leadership in a Complex World	3
Total Hours		12

Course List

Minimum Required Grade: C

War History Requirement

CODE	TITLE	HOURS
Complete one of the following courses:		
HSTA 316	American Civil War Era	3
or HSTA 333	American Military History	
Total Hours		3

Course List

Minimum Required Grade: C

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.

CODE	TITLE	HOURS
Complete 3 credits of the following courses:		3
HSTR 301X	Ancient Greek Social History	
HSTR 304H	Ancient Rome	
HSTA 316	American Civil War Era	
HSTA 333	American Military History	
HSTR 272E	Terrorism:Viol Mod Wrld	
Compete 3 credits of the following courses:		3
PSCI 230X	Intro to International Relations	
PSCI 335	American Foreign Policy	
Total Hours		6

Course List

Minimum Required Grade: C

Native American Studies < University of Montana

Native American Studies

- Overview
- Programs

Kate Shanley, 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 indigenous nations of North America 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.

Undergraduate

- Native American Studies B.A.

Undergraduate Minors

- Native American Studies

Undergraduates Certificate

- Language Rejuvenation and Maintenance Certificate of Art
- Native American Studies

Native American Studies B.A. < University of Montana

Native American Studies B.A.

Bachelor of Arts - Native American Studies

College of Humanities & Sciences

Degree Specific Credits: 39

Required Cumulative GPA: 2.5

Catalog Year: 2019-2020

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

CODE	TITLE	HOURS
Lower-Division Core Courses		12
Upper-Division Core Courses		18
Fundamentals		
Indigenous		
History		
Elective Courses		9
Total Hours		39

Course List

Lower-Division Core Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
NASX 105H	Intro Native Amer Studies	3
NASX 201X	Indian Cultr Exprssd Thru Lang	3
NASX 235X	Oral/Written Trads Native Amer	3
NASX 280	NA Studies Rsrch Theors/Mthds	3
Total Hours		12

Course List

Minimum Required Grade: C-

Upper-Division Core Courses

Rule: Complete the following subcategories. 18 total credits required.

Fundamentals

CODE	TITLE	HOURS
Complete all of the following courses:		
NASX 304E	Native American Beliefs/Philos	3
NASX 475	Tribal Sovereignty	3
NASX 494	Seminar/Workshop	3
Total Hours		9

Course List

Minimum Required Grade: C-

Indigenous

CODE	TITLE	HOURS
Complete one of the following courses:		3
NASX 306X	Contemp Global Iss Indg People	
NASX 340	Native American Lit	
NASX 360	Native Amer and Cinema	
Total Hours		3

Course List

Minimum Required Grade: C-

History

CODE	TITLE	HOURS
Complete all of the following courses:		6
NASX 464	Hist Amer Indian Affrs to 1776	
NASX 465	History of American Indian Affairs in the 19th Century	
Total Hours		6

Course List

Minimum Required Grade: C-

Elective Courses

CODE	TITLE	HOURS
Complete 9 credits from the following courses:		9
AAST 260	African Americans and Native Americans	
ANTY 122S	Race and Minorities	
ANTY 323X	Native Peoples of Montana	
ANTY 330X	Peoples and Cultures of World	
HSTR 369	20th Cent Amer West	
NASX 141	Elementary Blackfoot I	
NASX 142	Elementary Blackfoot II	
NASX 180	Event Planning	
NASX 191	Special Topics	
NASX 198	Internship	
NASX 210X	Native Amer Sports & Games	
NASX 231X	Indig World View Perspectives	
NASX 260X	Indig Community Developmnt	
NASX 291	Special Topics	
NASX 354X	Indians of MT since Rsrvtn Era	
NASX 360	Native Amer and Cinema	
NASX 391	Special Topics	
NASX 394	Workshop/Seminar	
NASX 403	Contmp Tribal Resource Issues	
NASX 405H	Gndr Iss in Native Amer Stdies	
NASX 488	Stds in Native Amer Autobio	
NASX 491	Special Topics	
NASX 499	Senior Capstone/Thesis	
PHAR 320	Am Ind Health Issues	
Total Hours		9

Course List

Minimum Required Grade: C-

Native American Studies Minor < University of Montana

Native American Studies Minor

Minor - Native American Studies

College of Humanities & Sciences

Degree Specific Credits: 21

Required Cumulative GPA: 2.5

Catalog Year: 2019-2020

Summary

CODE	TITLE	HOURS
Core Courses		12
Degree Electives		9
Total Hours		21

Course List

Core Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
NASX 105H	Intro Native Amer Studies	3
NASX 235X	Oral/Written Trads Native Amer	3
NASX 304E	Native American Beliefs/Philos	3
NASX 475	Tribal Sovereignty	3
Total Hours		12

Course List

Minimum Required Grade: C-

Degree Electives

CODE	TITLE	HOURS
Complete 9 credits from the following courses:		9
AAST 260	African Americans and Native Americans	
ANTY 122S	Race and Minorities	
ANTY 323X	Native Peoples of Montana	
ANTY 330X	Peoples and Cultures of World	
HSTR 369	20th Cent Amer West	

CODE	TITLE	HOURS
NASX 141	Elementary Blackfoot I	
NASX 142	Elementary Blackfoot II	
NASX 180	Event Planning	
NASX 191	Special Topics	
NASX 198	Internship	
NASX 201X	Indian Cultr Exprssd Thru Lang	
NASX 210X	Native Amer Sports & Games	
NASX 231X	Indig World View Perspectives	
NASX 260X	Indig Community Developmnt	
NASX 280	NA Studies Rsrch Theors/Mthds	
NASX 291	Special Topics	
NASX 306X	Contemp Global Iss Indg People	
NASX 340	Native American Lit	
NASX 354X	Indians of MT since Rsrvtn Era	
NASX 360	Native Amer and Cinema	
NASX 391	Special Topics	
NASX 394	Workshop/Seminar	
NASX 405H	Gndr Iss in Native Amer Stdies	
NASX 464	Hist Amer Indian Affrs to 1776	
NASX 465	History of American Indian Affairs in the 19th Century	
NASX 466	Hist of Indian Affrs from 1890	
NASX 488	Stds in Native Amer Autobio	
NASX 491	Special Topics	
NASX 499	Senior Capstone/Thesis	
Total Hours		9

Course List

Minimum Required Grade: C-

Native American Studies Certificate < University of Montana

Native American Studies Certificate

Post-Secondary Certificate - Native American Studies

College of Humanities & Sciences

Degree Specific Credits: 12

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Summary

CODE	TITLE	HOURS
Core Courses		6
Elective Courses		6
Total Hours		12

Course List

Core Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
NASX 235X	Oral/Written Trads Native Amer	3
NASX 475	Tribal Sovereignty	3
Total Hours		6

Course List

Minimum Required Grade: C-

Elective Courses

CODE	TITLE	HOURS
Complete two of the following courses:		6
ANTY 150X	Archaeology of Yellowstone: 11,000 Years of Native Americans in Yellowstone National Park	
ENST 489S	Environmental Justice Issues & Solutions	
HSTA 255	Montana History	
NASX 210X	Native Amer Sports & Games	
NASX 235X	Oral/Written Trads Native Amer	
NASX 260X	Indig Community Developmnt	
NASX 304E	Native American Beliefs/Philos	
NASX 306X	Contemp Global Iss Indg People	
NASX 340	Native American Lit	
NASX 430	American Indian Education	
NASX 464	Hist Amer Indian Affrs to 1776	
NASX 465	History of American Indian Affairs in the 19th Century	
PHAR 320	Am Ind Health Issues	
S W 491	Special Topics (Social Justice in Indian Country)	
Total Hours		6

Course List

Minimum Required Grade: C-

Language Rejuvenation and Maintenance Certificate < University of Montana

Language Rejuvenation and Maintenance Certificate

Post-secondary Certificate - Language Rejuvenation & Maintenance

College of Humanities & Sciences

Degree Specific Credits: 18

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Summary

CODE	TITLE	HOURS
Core Courses		9
Degree Electives		9
Total Hours		18

Course List

Core Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
ANTY 476	Methods for Native Languages	3
CSD 210	Speech & Lang Devel	3
NASX 201X	Indian Cultr Exprssd Thru Lang	3
Total Hours		9

Course List

Minimum Required Grade: C-

Elective Courses

Note: ANTY 476 may be repeated to count for elective credit.

CODE	TITLE	HOURS
Complete 9 credits from the following courses:		9
ANTY 326E	Indigenous Peoples & the Ethics of Development	
ANTY 423	Culture and Identity	
ANTY 476	Methods for Native Languages	
NASX 141	Elementary Blackfoot I	
NASX 235X	Oral/Written Trads Native Amer	
NPAD 411	Nonprofit Grant Writing	
NPAD 412	Nonprofit Fundraising	
Total Hours		9

Course List

Minimum Required Grade: C-

Philosophy Department

Paul Muench, Chair

Philosophy is the search for an understanding of how the world as a whole hangs together and of how we are to assume our place in the world. Philosophy pursues its goal first of all historically. It is the trustee of the heritage of great philosophical texts, and it engages those texts in conversation with contemporary problems. Second, philosophy turns to the contemporary world directly 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.

Information on UM Philosophy courses can be found here.

More information is available online at the Philosophy Department website.

Undergraduate

- Philosophy B.A.
- 5-Year Dual Philosophy B.A./M.A. (Environmental Philosophy Emphasis)

Undergraduate Minors

- Philosophy
- Ethics

Undergraduate Certificates

- Environmental Ethics

Philosophy B.A. < University of Montana

Philosophy B.A.

Bachelor of Arts - Philosophy

College of Humanities & Sciences

Degree Specific Credits: 33

Required Cumulative GPA: 1.7

Catalog Year: 2019-2020

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

CODE	TITLE	HOURS
Philosophy Lower-Division Core		12
Philosophy Upper-Division Core		12
History		
Value Theory		
Continental Philosophy		
Analytic Philosophy		
Required Upper-Division Electives in Philosophy		6
Senior Seminar		3
Total Hours		33

Course List

Philosophy Lower-Division Core

Note: The following courses also satisfy general education requirements:

- PHL 210E fulfills the "Intermediate Writing" and "Ethics and Human Values" requirements.
- PHL 261Y and PHL 262Y both fulfill the "Democracy and Citizenship" requirement.

CODE	TITLE	HOURS
Complete all of the following courses:		
PHL 210E	Moral Philosophy	3
PHL 233	Intro to Logic: Deduction	3
PHL 261Y	History of Ancient Philosophy	3
PHL 262Y	History of Modern Philosophy	3
Total Hours		12

Course List

Minimum Required Grade: C-

Philosophy Upper-Division Core

Rule: Complete four courses (12 credits) with one course (3 credits) in each of the following four core areas. 12 total credits required.

I. History

Note: Special Topics courses taught at the 400-level (PHL 491 may count as upper-division core courses provided that they have a suitable content (consult the department advisor).

CODE	TITLE	HOURS
Complete one of the following courses:		3
PHL 462	Early Modern Philosophy	
PHL 464	Kant	
PHL 465	Plato	
PHL 466	Aristotle	
Total Hours		3

Course List

Minimum Required Grade: C-

II. Value Theory

Note: Special Topics courses taught at the 400-level (PHL 491) may count as upper-division core courses provided that they have a suitable content (consult the department advisor).

CODE	TITLE	HOURS
Complete one of the following courses:		3
PHL 412	Ethics and Public Affairs	
PHL 422	Environmental Philosophy	
PHL 427	Topics in Philosophy of Art	
PHL 429	Philosophy in Literature	
PHL 449	History of Moral and Political Philosophy	
PHL 450	Contemporary Moral/Political Theory	
PHL 455	Philosophy of Society and Culture	
Total Hours		3

Course List

Minimum Required Grade: C-

III. Continental Philosophy

Note: Special Topics courses taught at the 400-level (PHL 491) may count as upper-division core courses provided that they have a suitable content (consult the department advisor).

CODE	TITLE	HOURS
Complete one of the following courses:		3
PHL 467	19th Century Continental Philosophy	
PHL 468	20th Century Continental Philosophy	
Total Hours		3

Course List

Minimum Required Grade: C-

IV. Analytic Philosophy

Note: Special Topics courses taught at the 400-level (PHL 491) may count as upper-division core courses provided that they have a suitable content (consult the department advisor).

CODE	TITLE	HOURS
Select one of the following:		3
PHL 403	Early Wittgenstein	
PHL 404	Later Wittgenstein	
PHL 407	Epistemology	
PHL 408	Philosophy of Mind	
PHL 445	Central Issues in Philosophy of Science	
Total Hours		3

Course List

Minimum Required Grade: C-

Required Upper-Division Electives in Philosophy

Note: Any course taken to fulfill an Upper-Division Core area requirement cannot also count as an Upper-Division Elective. Internships (PHL 398 and PHL 498) cannot satisfy both upper-division electives.

CODE	TITLE	HOURS
Complete two of the following courses:		6
PHL 311	The Good, Right, Beautiful	
PHL 316	Historical Figures in Phil	
PHL 317E	Law and Morality	
PHL 321E	Philosophy & Biomedical Ethics	
PHL 323	Ethics of Climate Change	
PHL 351	Philosophy and Feminism	
PHL 363H	Ancient Greek and Roman Philosophy	
PHL 390	Research	
PHL 391	Special Topics	
PHL 392	Independent Study	
PHL 394	Seminar	
PHL 398	Internship	
PHL 403	Early Wittgenstein	
PHL 404	Later Wittgenstein	
PHL 407	Epistemology	
PHL 408	Philosophy of Mind	
PHL 412	Ethics and Public Affairs	
PHL 422	Environmental Philosophy	
PHL 427	Topics in Philosophy of Art	
PHL 429	Philosophy in Literature	
PHL 445	Central Issues in Philosophy of Science	
PHL 449	History of Moral and Political Philosophy	
PHL 450	Contemporary Moral/Political Theory	
PHL 455	Philosophy of Society and Culture	
PHL 462	Early Modern Philosophy	
PHL 464	Kant	
PHL 465	Plato	
PHL 466	Aristotle	
PHL 467	19th Century Continental Philosophy	

CODE	TITLE	HOURS
PHL 468	20th Century Continental Philosophy	
PHL 490	Research	
PHL 491	Special Topics	
PHL 492	Independent Study	
PHL 494	Seminar	
PHL 498	Internship	
Total Hours		6

Course List

Minimum Required Grade: C-

Senior Seminar

Note: PHL 499 fulfills the Advanced College Writing requirement.

CODE	TITLE	HOURS
Complete the following course:		
PHL 499	Senior Seminar (normally taken during the spring semester of senior year)	3
Total Hours		3

Course List

Minimum Required Grade: C-

Modern and Classical Language Requirement

Note: Students who major in philosophy must demonstrate second semester proficiency in a foreign language either by completing two 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 < University of Montana

Philosophy Minor

Minor - Philosophy

College of Humanities & Sciences

Degree Specific Credits: 18

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: Students must complete a minimum of 18 credits in philosophy; at least 6 credits must be in courses numbered 300 and higher.

Summary

CODE	TITLE	HOURS
Lower-Division Core		12
Core Area Requirement		6
History		
Value Theory		
Continental Philosophy		
Analytic Philosophy		
Total Hours		18

Course List

Lower Division Core

Note: The following courses also satisfy general education requirements:

- PHL 210E fulfills the "Approved Writing Course" and "Ethics & Human Values."
- PHL 261Y and PHL 262Y both fulfill the "Democracy and Citizenship" requirement.

CODE	TITLE	HOURS
Complete all of the following courses:		
PHL 210E	Moral Philosophy	3
PHL 233	Intro to Logic: Deduction	3
PHL 261Y	History of Ancient Philosophy	3
PHL 262Y	History of Modern Philosophy	3
Total Hours		12

Course List

Minimum Required Grade: C-

Core Area Requirement

Note: Special Topics courses taught at the 400-level (PHL 491) may count as upper-division core courses provided that they have a suitable content (consult the department advisor).

CODE	TITLE	HOURS
Complete two of the following courses, 3 credits from two different core areas:		6
History		
PHL 462	Early Modern Philosophy	
PHL 464	Kant	
PHL 465	Plato	
PHL 466	Aristotle	
Value Theory		
PHL 412	Ethics and Public Affairs	
PHL 422	Environmental Philosophy	
PHL 427	Topics in Philosophy of Art	
PHL 429	Philosophy in Literature	
PHL 449	History of Moral and Political Philosophy	
PHL 450	Contemporary Moral/Political Theory	
PHL 455	Philosophy of Society and Culture	
Continental Philosophy		
PHL 467	19th Century Continental Philosophy	
PHL 468	20th Century Continental Philosophy	
Analytic Philosophy		
PHL 403	Early Wittgenstein	
PHL 404	Later Wittgenstein	
PHL 407	Epistemology	
PHL 408	Philosophy of Mind	
PHL 445	Central Issues in Philosophy of Science	
Total Hours		6

Course List

Minimum Required Grade: C-

Ethics Minor

- Overview
- Requirements

Understanding ethical practices and increasing ethical knowledge is important to a successful life, both personally and professionally. Tailored to students majoring in other disciplines, UM-Missoula s Ethics Minor is designed to enhance the capacities of critical thinking, social engagement, and reflection on major moral issues. The interdisciplinary curriculum provides students with training in ethical frameworks and methods to help ensure successful execution of both future professional duties and personal endeavors. Students will acquire tools for critical reflection that will help them to address the major moral challenges of the 21st century, and strengthen their ability to pursue careers in business, science, journalism, advocacy, nonprofit work, law, and health care (among others).

Minor - Ethics

College of Humanities & Sciences

Degree Specific Credits: 18

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: Students must complete a minimum of 18 credits in ethics/value courses; at least 6 credits must be in courses numbered 300 and higher.

Summary

Course List		
CODE	**TITLE**	**HOURS**
Lower Division Ethics/Value Requirement		3
Upper Division Ethics/Value Requirement		6
Elective Ethics/Value Requirement		9
Total Hours		18

Lower-Division Ethics/Value Requirement

Note: PHL 110E, PHL 112E, and PHL 114E fulfill the Ethical & Human Values General Education requirement. PHL 210E fulfills the "Approved Writing Course" and "Ethical & Human Values" General Education requirements.

Course List		
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		3
PHL 110E	Introduction to Ethics	
PHL 112E	Intro Ethics and Environment	
PHL 114E	Intro to Political Ethics	
PHL 210E	Moral Philosophy	
Total Hours		3

Minimum Required Grade: C-

Upper-Division Ethics/Value Requirement

Note: Special Topics courses taught at the 300- or 400-level (PHL 391, PHL 491) may count as upper-division ethics/value courses at the discretion of the Philosophy Department advisor provided that the course has suitable content.

Course List		
CODE	**TITLE**	**HOURS**
Complete two of the following courses:		6
PHL 311	The Good, Right, Beautiful	
PHL 317E	Law and Morality	
PHL 321E	Philosophy & Biomedical Ethics	
PHL 323	Ethics of Climate Change	
PHL 351	Philosophy and Feminism	
PHL 412	Ethics and Public Affairs	
PHL 422	Environmental Philosophy	
PHL 427	Topics in Philosophy of Art	
PHL 429	Philosophy in Literature	
PHL 449	History of Moral and Political Philosophy	
PHL 450	Contemporary Moral/Political Theory	
PHL 455	Philosophy of Society and Culture	
Total Hours		6

Minimum Required Grade: C-

Elective Ethics/Value Requirement

Note: Courses that satisfy either the Lower-Division Ethics/Value requirement or the Upper-Division Ethics/Value requirement cannot also satisfy the Elective Ethics/Value requirement.

		Course List
CODE	**TITLE**	**HOURS**
Complete three of the following courses:		9
AHMS 270E	Medical Ethics	
BGEN 220E	Business Ethics and Social Responsibility	
CHMY 305E	Ethics, Literature and Writing in the Sciences	
CLAS 365E	The Roots of Western Ethics	
CSCI 215E	Social & Ethical Issues in CS	
CSCI 315E	Computers, Ethics, and Society	
EDU 407E	Ethics & Policy Issues	
ENST 320E	Earth Ethics	

GEO 304E	Science and Society	
GH 316E	Talking to God: Bhagavad Gita	
HONR 122E	Ways of Knowing II	
HSTR 272E	Terrorism:Viol Mod Wrld	
HTH 475E	Legal and Ethical Issues Health and Exercise Professions	
NASX 303E	Ecological Perspectives in Native American Traditions	
NASX 304E	Native American Beliefs/Philos	
NRSM 349E	Climate Change Ethics/Policy	
NRSM 389E	Ethics Forestry & Conservation	
PHL 110E	Introduction to Ethics	
PHL 112E	Intro Ethics and Environment	
PHL 114E	Intro to Political Ethics	
PHL 210E	Moral Philosophy	
PHL 311	The Good, Right, Beautiful	
PHL 317E	Law and Morality	
PHL 321E	Philosophy & Biomedical Ethics	
PHL 323	Ethics of Climate Change	
PHL 351	Philosophy and Feminism	
PHL 412	Ethics and Public Affairs	
PHL 422	Environmental Philosophy	
PHL 427	Topics in Philosophy of Art	
PHL 429	Philosophy in Literature	
PHL 449	History of Moral and Political Philosophy	
PHL 450	Contemporary Moral/Political Theory	
PHL 455	Philosophy of Society and Culture	
PSCI 250E	Intro to Political Theory	
RLST 281E	Comparative Ethics	
S W 410E	Social Work Ethics	
Total Hours		9

Minimum Required Grade: C-

University Of Montana

Environmental Ethics Certificate

Post-Secondary Certificate - Environmental Ethics

College of Humanities & Sciences

Degree Specifics: 12

Required Cumulative GPA: 1.7

Catalog Year: 2019-2020

Summary

Course List		
CODE	**TITLE**	**HOURS**
Required Courses		6
Elective Courses		6
Total Hours		12

Required Courses

Note: PHL 311 can substitute for PHL 422 when PHL 311 s course title is "Philosophy and the Environmental Crisis." PHL 323 can also substitute for PHL 422 except when it is offered as a field course.

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		6
PHL 112E	Intro Ethics and Environment	
PHL 422	Environmental Philosophy	
Total Hours		6

Minimum Required Grade: C-

Elective Courses

		Course List
CODE	**TITLE**	**HOURS**
Complete two of the following courses (at least one must be at the 400 or 500 level):		6
PHL 210E	Moral Philosophy	
ENST 225S	Sustainable Communities	
ENST 230H	Nature and Society	
NRSM 265	Elements of Ecological Restoration	
NASX 303E	Ecological Perspectives in Native American Traditions	
NASX 304E	Native American Beliefs and Philosophy	
ENST 320E	Earth Ethics	
PHL 323	Ethics of Climate Change (field course)	
NRSM 349E	Climate Change Ethics and Policy	
ENST 367	Environmental Politics & Policies	
NRSM 370S	Wildland Conservation Policy/Governance	
NRSM 373	Wilderness and Civilization	
NRSM 389E	Ethics Forestry & Conservation	
NRSM 426	Climate and Society	
ENST 430	Culture & Agriculture	
PSCI 442	Environmental Policy	
ENST 480	Food Justice and Sustainability	
PTRM 482	Wilderness & Protected Area Management	
ENST 487	Globalization, Justice & Environment	
ENST 489S	Environmental Justice Issues & Solutions	
PHL 504	Topics in Environmental Philosophy	
PHL 505	Issues in the Anthropocene	
PTRM 582	Concept of Wilderness & PA	
Total Hours		6

Minimum Required Grade: C-

Physics and Astronomy Department < University of Montana

Physics and Astronomy Department

- Overview
- Programs

Andrew S. Ware, 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 concentrations that combine a solid background in the study of physics with in-depth study in other fields. These concentrations 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

Undergraduate

- Physics B.A.
- Physics B.A., Astronomy Concentration
- Physics B.A., Computational Physics Concentration
- Physics B.A., Teaching Broadfield Science Concentration

Undergraduate Minors

- Astronomy
- Physics

Physics B.A. < University of Montana

Physics B.A.

Bachelor of Arts - Physics

College of Humanities & Sciences

Degree Specific Credits: 68

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

CODE	TITLE	HOURS
Lower-Division Physics		10
Upper-Division Physics		30
Physics Electives		6
Math Requirements		16
Computer Science Requirements		3
Advanced College Writing Requirement		3
Teaching Physics Track		
Total Hours		68

Course List

Lower-Division Physics

CODE	TITLE	HOURS
Complete one of the following Physics sequences:		10
Algebra- and Trigonometry-based Physics:		
PHSX 205N & PHSX 206N	College Physics I and College Physics I Laboratory	
PHSX 207N & PHSX 208N	College Physics II and College Physics II Laboratory	
Calculus-based Physics (strongly recommended):		
PHSX 215N & PHSX 216N	Fund of Physics w/Calc I and Physics Laboratory I w/Calc	
PHSX 217N & PHSX 218N	Fund of Physics w/Calc II and Physics Laboratory II w/Calc	
Total Hours		10

Course List

Minimum Required Grade: C-

Upper-Division Physics

CODE	TITLE	HOURS
Complete all of the following courses:		
PHSX 301	Intro Theoretical Physics	3
PHSX 311	Oscillations and Waves	2
PHSX 320	Classical Mechanics	3
PHSX 323	Intermediate Physics Lab	3
PHSX 343	Modern Physics	3
PHSX 423	Electricity & Magnetism I	3
PHSX 444	Advanced Physics Lab	3
PHSX 461	Quantum Mechanics I	3
PHSX 499	Senior Capstone Seminar	1
Complete two of the following courses:		6
PHSX 425	Electricity & Magnetism II	
PHSX 446	Thermodyn & Stat Mech	
PHSX 462	Quantum Mechanics II	
Total Hours		30

Course List

Minimum Required Grade: C-

Physics Electives

Note: Other PHSX courses may be substituted with adviser approval.

CODE	TITLE	HOURS
Complete two of the following courses:		6
PHSX 141N	Einstein's Relativity	
or ASTR 142N	The Evolving Universe	
PHSX 327	Optics	
PHSX 330	Communicating Physics	
PHSX 333	Computational Physics	
PHSX 425	Electricity & Magnetism II (2 of these 3 courses must be taken in the physics core, the remaining course can be used as an elective)	
or PHSX 446	Thermodyn & Stat Mech	
or PHSX 462	Quantum Mechanics II	
Total Hours		6

Course List

Minimum Required Grade: C-

Math Requirements

Note: M 317, M 412, and M 418 are recommended as well

CODE	TITLE	HOURS
Complete all of the following courses:		
M 171	Calculus I	4
M 172	Calculus II	4
M 221	Introduction to Linear Algebra	4
M 273	Multivariable Calculus	4
Total Hours		16

Course List

Minimum Required Grade: C-

Computer Science Requirements

CODE	TITLE	HOURS
Complete one of the following courses:		3
CSCI 100	Intro to Programming	
CSCI 135	Fund of Computer Science I	
PHSX 333	Computational Physics (strongly recommended)	
Total Hours		3

Course List

Minimum Required Grade: C-

Advanced College Writing Requirement

Note: May substitute another advanced writing course as approved by the department chair.

CODE	TITLE	HOURS
Complete the following course:		
PHSX 330	Communicating Physics	3
Total Hours		3

Course List

Minimum Required Grade: C-

Teaching Physics Track

Notes:

- This teaching track contains different/additional course requirements designed to meet state standards. Those interested in teaching in K-12 schools must complete the teaching track of a major in a teaching content area plus the Teacher Education Program through the Department of Teaching and Learning. Additional teaching areas can be added through completion of the teaching track of a major or minor in that content area.
  - Secondary Education Licensure Program
  - Licensure Degree Requirements
- To complete this teaching track, you need to contact the Teaching and Learning Department. You do not fill out a major/minor form for graduation or the major/minor/concentration section of the major change form. Approvals for this track must come from the Teaching and Learning Department.
- Tracks will not appear on your UM transcript, diploma, university lists, student data system, or university publications. They are used for advising purposes only. You do not fill out a major change for a track.

Teaching Physics Track Requirement

Note: The EDU 497 course number is used for multiple courses. Students should register for EDU 497 Methods: 5-12 Science.

CODE	TITLE	HOURS
Complete the following course:		
EDU 497	Teaching and Assessing	4
Total Hours		4

Course List

Minimum Required Grade: C-

Secondary Teaching Licensure

Note: For endorsement to teach physics, a student also must gain admission to the Teacher Education Program and meet all the requirements for secondary teaching licensure. For more information, see the Teaching and Learning Department.

Physics B.A. - Astronomy < University of Montana

Physics B.A. - Astronomy

- Overview
- Requirements

The astronomy concentration 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 Concentration

College of Humanities & Sciences

Degree Specific Credits: 69

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

CODE	TITLE	HOURS
Lower-Division Physics Core		10
Lower-Division Astronomy Core		4
Upper-Division Physics Core		12
Upper-Division Astronomy Core		9
Major Electives		12
Physics Electives		
Physics Laboratory Electives		
Math Requirements		16
Computer Science Electives		3
Advanced College Writing Requirement		3
Total Hours		69

Course List

Lower-Division Physics Core

CODE	TITLE	HOURS
Complete one of the following Physics sequences:		10
Algebra- and Trigonometry-based Physics:		
PHSX 205N & PHSX 206N	College Physics I and College Physics I Laboratory	
PHSX 207N & PHSX 208N	College Physics II and College Physics II Laboratory	
Calculus-based Physics (strongly recommended):		
PHSX 215N & PHSX 216N	Fund of Physics w/Calc I and Physics Laboratory I w/Calc	
PHSX 217N & PHSX 218N	Fund of Physics w/Calc II and Physics Laboratory II w/Calc	
Total Hours		10

Course List

Minimum Required Grade: C-

Lower-Division Astronomy Core

Rule: Complete all of the courses in one of the two options. 4 total credits required.

Astronomy Core: Option 1

CODE	TITLE	HOURS
If option 1 is chosen, complete all of the following courses:		
ASTR 132N	Stars, Galaxies, and the Universe	3
ASTR 135N	Stars, Galaxies, and the Universe Lab	1
Total Hours		4

Course List

Minimum Required Grade: C-

Astronomy Core: Option 2

CODE	TITLE	HOURS
If option 2 is chosen, complete the following course:		
ASTR 142N	The Evolving Universe	4
Total Hours		4

Course List

Minimum Required Grade: C-

Upper-Division Physics Core

CODE	TITLE	HOURS
Complete all of the following courses:		
PHSX 301	Intro Theoretical Physics	3
PHSX 311	Oscillations and Waves	2
PHSX 343	Modern Physics	3
PHSX 461	Quantum Mechanics I	3
PHSX 499	Senior Capstone Seminar	1
Total Hours		12

Course List

Minimum Required Grade: C-

Upper-Division Astronomy Core

Note: In addition, ASTR 351 and ASTR 362 are recommended.

CODE	TITLE	HOURS
Complete all of the following courses:		
ASTR 353	Galactic Astrophysics	3
ASTR 363	Stellar Astr & Astrophys I	3
ASTR 365	Stellar Ast & Astrophys II	3
Total Hours		9

Course List

Minimum Required Grade: C-

Major Electives

Rule: Complete the following subcategories of courses. 12 total credits required.

Physics Electives

CODE	TITLE	HOURS
Complete three of the following courses:		9
ASTR 351	Planetary Science	
PHSX 320	Classical Mechanics	
PHSX 327	Optics	
PHSX 333	Computational Physics	
PHSX 423	Electricity & Magnetism I	
PHSX 425	Electricity & Magnetism II	
PHSX 446	Thermodyn & Stat Mech	
PHSX 451	Elementary Particle Physics	
PHSX 462	Quantum Mechanics II	
PHSX 491	Special Topics	
Total Hours		9

Course List

Minimum Required Grade: C-

Physics Laboratory Electives

CODE	TITLE	HOURS
Complete one of the following laboratory courses:		3
ASTR 362	Observational Astronomy	
PHSX 323	Intermediate Physics Lab	
PHSX 444	Advanced Physics Lab	
Total Hours		3

Course List

Minimum Required Grade: C-

Math Requirements

Note: In addition, M 317, M 412, and M 418 are recommended.

CODE	TITLE	HOURS
Complete all of the following courses:		
M 171	Calculus I	4
M 172	Calculus II	4
M 221	Introduction to Linear Algebra	4
M 273	Multivariable Calculus	4
Total Hours		16

Course List

Minimum Required Grade: C-

Computer Science Electives

CODE	TITLE	HOURS
Select one of the following courses:		3
CSCI 100	Intro to Programming	
CSCI 135	Fund of Computer Science I	
PHSX 333	Computational Physics (strongly recommended)	
Total Hours		3

Course List

Minimum Required Grade: C-

Advanced College Writing Requirement

Note: May substitute another advanced writing course as approved by the department chair.

CODE	TITLE	HOURS
Complete the following course:		
PHSX 330	Communicating Physics	3
Total Hours		3

Course List

Minimum Required Grade: C-

Physics B.A. - Computational Physics < University of Montana

Physics B.A. - Computational Physics

- Overview
- Requirements

The computational physics concentration 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 Concentration

College of Humanities & Sciences

Degree Specific Credits: 73

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

CODE	TITLE	HOURS
Lower-Division Physics Core		10
Upper-Division Physics Core		18
Physics Elective		3
Math Requirements		19
Computer Science Requirements		20
Computer Science Core Courses		
Computer Science Electives		
Advanced College Writing Requirement		3
Total Hours		73

Course List

Lower-Division Physics Core

CODE	TITLE	HOURS
Complete one of the following Physics sequences:		10
Algebra- and Trigonometry-based Physics:		
PHSX 205N & PHSX 206N	College Physics I and College Physics I Laboratory	
PHSX 207N & PHSX 208N	College Physics II and College Physics II Laboratory	
Calculus-based Physics (strongly recommended):		
PHSX 215N & PHSX 216N	Fund of Physics w/Calc I and Physics Laboratory I w/Calc	
PHSX 217N & PHSX 218N	Fund of Physics w/Calc II and Physics Laboratory II w/Calc	
Total Hours		10

Course List

Minimum Required Grade: C-

Upper-Division Physics Core

CODE	TITLE	HOURS
Complete all of the following courses:		
PHSX 301	Intro Theoretical Physics	3
PHSX 311	Oscillations and Waves	2
PHSX 320	Classical Mechanics	3
PHSX 333	Computational Physics	3
PHSX 343	Modern Physics	3
PHSX 423	Electricity & Magnetism I	3
PHSX 499	Senior Capstone Seminar	1
Total Hours		18

Course List

Minimum Required Grade: C-

Physics Elective

CODE	TITLE	HOURS
Complete one of the following courses:		3
PHSX 141N	Einstein's Relativity	
PHSX 323	Intermediate Physics Lab	
PHSX 327	Optics	
PHSX 330	Communicating Physics	
PHSX 425	Electricity & Magnetism II (strongly recommended)	
PHSX 444	Advanced Physics Lab	
PHSX 446	Thermodyn & Stat Mech	
PHSX 461	Quantum Mechanics I (strongly recommended)	
PHSX 462	Quantum Mechanics II	
Total Hours		3

Course List

Minimum Required Grade: C-

Math Requirements

Note: In addition, M 307, STAT 341, and STAT 458 are recommended.

CODE	TITLE	HOURS
Complete all of the following courses:		
M 171	Calculus I	4
M 172	Calculus II	4
M 221	Introduction to Linear Algebra	4
M 225	Introduction to Discrete Mathematics	3
M 273	Multivariable Calculus	4
Total Hours		19

Course List

Minimum Required Grade: C-

Computer Science Requirements

Rule: Complete the following subcategories of courses. 20 total credits required.

Computer Science Core Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
CSCI 135	Fund of Computer Science I	3
CSCI 136	Fund of Computer Science II	3
CSCI 232	Data Structures and Algorithms	4
CSCI 332	Design/Analysis of Algorithms	3
Total Hours		13

Course List

Minimum Required Grade: C-

Computer Science Electives

CODE	TITLE	HOURS
Complete 7 credits from any CSCI course numbered 200 and above. The following courses are recommended:		7
CSCI 205	Programming with C/C++	
CSCI 361	Computer Architecture	
CSCI 477	Simulation	
Total Hours		7

Course List

Minimum Required Grade: C-

Advanced College Writing Requirement

Note: May substitute another advanced writing course as approved by the department chair.

CODE	TITLE	HOURS
Complete the following course:		
PHSX 330	Communicating Physics	3
Total Hours		3

Course List

Minimum Required Grade: C-

Physics B.A. - Teaching Broadfield Science

- Overview
- Requirements

Individuals interested in teaching in K-12 schools must complete a degree in the content area they want to teach plus the Teacher Education Program through the Department of Teaching and Learning. Individuals must complete the teaching track within that degree program, which may contain different course requirements than the non-teaching track 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; Broadfield Teaching Science Concentration

College of Humanities & Sciences

Degree Specific Credits: 83-84

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Teaching and Learning 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.

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

Course List		
CODE	**TITLE**	**HOURS**
Physics Requirements		24
Required Physics Courses		
Physics Elective		
Math Requirements		15
Statistics Requirements		3-4
Astronomy Requirements		4
Geology Requirements		7
Biology Requirements		12
Chemistry Requirements		11
Advanced College Writing Requirement		3
Teaching Methods Requirement		4
Total Hours		83-84

Physics Requirements

Rule: Complete the following subcategories. 24 total credits required.

Required Physics Courses

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
PHSX 215N	Fund of Physics w/Calc I	4
PHSX 216N	Physics Laboratory I w/Calc	1
PHSX 217N	Fund of Physics w/Calc II	4
PHSX 218N	Physics Laboratory II w/Calc	1
PHSX 301	Intro Theoretical Physics	3
PHSX 311	Oscillations and Waves	2
PHSX 330	Communicating Physics	3
PHSX 343	Modern Physics	3
Total Hours		21

Minimum Required Grade: C-

Physics Elective

Course List		
CODE	**TITLE**	**HOURS**
Complete 1 additional upper division Physics course.		3
Total Hours		3

Math Requirements

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
M 171	Calculus I	4
M 172	Calculus II	4
M 273	Multivariable Calculus	4
M 311	Ordinary Differential Equations and Systems	3
Total Hours		15

Minimum Required Grade: C-

Statistics Requirements

Course List		
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		
STAT 216	Introduction to Statistics	3-4
or STAT 341	Introduction to Probability and Statistics	
Total Hours		3-4

Minimum Required Grade: C-

Astronomy Requirements

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
ASTR 131N	Planetary Astronomy	3
ASTR 134N	Planetary Astronomy Lab	1
Total Hours		4

Minimum Required Grade: C-

Geology Requirements

Rule: Complete the following subcategories. 7 total credits required.

Required Geology Courses

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
GEO 101N	Introduction to Physical Geology	3
GEO 102N	Introduction to Physical Geology Lab	1
Total Hours		4

Minimum Required Grade: C-

Geology Electives

Course List		
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		3
ASTR 351	Planetary Science	
GEO 105N	Oceanography	
Total Hours		3

Minimum Required Grade: C-

Biology Requirements

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
BIOB 160N	Principles of Living Systems	3
BIOB 161N	Prncpls of Living Systems Lab	1
BIOB 260	Cellular and Molecular Biology	4
BIOB 272	Genetics and Evolution	4
Total Hours		12

Minimum Required Grade: C-

Chemistry Requirements

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
CHMY 141N & CHMY 142N	College Chemistry I and College Chemistry I Lab	5
CHMY 143N & CHMY 144N	College Chemistry II and College Chemistry II Lab	5
CHMY 485	Laboratory Safety	1
Total Hours		11

Minimum Required Grade: C-

Advanced College Writing Requirement

Note: May substitute another advanced writing course as approved by the department chair.

Course List		
CODE	**TITLE**	**HOURS**
Complete the following course:		
PHSX 330	Communicating Physics	3
Total Hours		3

Minimum Required Grade: C-

Teaching Methods Requirement

Note: The EDU 497 course number is used for multiple courses. Students should register for EDU 497 Methods: 5-12 Science.

Course List		
CODE	**TITLE**	**HOURS**
Complete the following course:		
EDU 497	Teaching and Assessing	4
Total Hours		4

Minimum Required Grade: C-

Secondary Teaching Licensure

Note: For endorsement to teach physics, a student also must gain admission to the Teacher Education Program and meet all the requirements for secondary teaching licensure. For more information, see the Teaching and Learning Department.

Astronomy Minor < University of Montana

Astronomy Minor

Minor - Astronomy

College of Humanities & Sciences

Degree Specific Credits: 25-26

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: Mathematics prerequisites for the Astronomy minor are M 171, M 172, and M 273

Summary

CODE	TITLE	HOURS
Lower-Division Physics Courses		10
Lower-Division Astronomy Courses		6-7
Core Course		
Core Elective		
Electives		9
Total Hours		25-26

Course List

Lower-Division Physics Courses

Note: The Physics with Calculus series (PHSX 215N - PHSX 218N) is strongly recommended.

CODE	TITLE	HOURS
Complete one of the following Physics sequences:		10
Algebra- and Trigonometry-based Physics:		
PHSX 205N & PHSX 206N	College Physics I and College Physics I Laboratory	
PHSX 207N & PHSX 208N	College Physics II and College Physics II Laboratory	
Calculus-based Physics:		
PHSX 215N & PHSX 216N	Fund of Physics w/Calc I and Physics Laboratory I w/Calc	
PHSX 217N & PHSX 218N	Fund of Physics w/Calc II and Physics Laboratory II w/Calc	
Total Hours		10

Course List

Minimum Required Grade: C-

Lower-Division Astronomy Courses

Rule: Complete the following subcategories of courses. 6-7 total credits required.

Core Course

CODE	TITLE	HOURS
Complete the following course:		
ASTR 131N	Planetary Astronomy	3
Total Hours		3

Course List

Minimum Required Grade: C-

Core Elective

CODE	TITLE	HOURS
Complete one of the following courses:		
ASTR 132N	Stars, Galaxies, and the Universe	3-4
or ASTR 142N	The Evolving Universe	
Total Hours		3-4

Course List

Minimum Required Grade: C-

Electives

CODE	TITLE	HOURS
Complete three of the following courses:		9
ASTR 351	Planetary Science	
ASTR 353	Galactic Astrophysics	
ASTR 362	Observational Astronomy	
ASTR 363	Stellar Astr & Astrophys I	
Total Hours		9

Course List

Minimum Required Grade: C-

Physics Minor < University of Montana

Physics Minor

Minor - Physics

College of Humanities & Sciences

Degree Specific Credits: 24

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: Mathematics prerequisites for the physics minor are M 171, M 172, M 273, (and M 221 if needed).

Summary

CODE	TITLE	HOURS
Required Lower-Division Courses		10
Upper-Division Core Course		3
Elective Courses		11
Teaching Physics Track		
Total Hours		24

Course List

Required Lower-Division Courses

Note: The Physics with Calculus series (PHSX 215N - PHSX 218N) is strongly recommended.

CODE	TITLE	HOURS
Complete one of the following Physics sequences:		10
Algebra- and Trigonometry-based Physics:		
PHSX 205N & PHSX 206N	College Physics I and College Physics I Laboratory	
PHSX 207N & PHSX 208N	College Physics II and College Physics II Laboratory	
Calculus-based Physics (strongly recommended):		
PHSX 215N & PHSX 216N	Fund of Physics w/Calc I and Physics Laboratory I w/Calc	
PHSX 217N & PHSX 218N	Fund of Physics w/Calc II and Physics Laboratory II w/Calc	
Total Hours		10

Course List

Minimum Required Grade: C-

Upper-Division Core Course

CODE	TITLE	HOURS
Complete the following course:		
PHSX 301	Intro Theoretical Physics	3
Total Hours		3

Course List

Minimum Required Grade: C-

Elective Courses

CODE	TITLE	HOURS
Complete 11 credits of the following courses, 8 of which must be upper-division:		11
PHSX 141N	Einstein's Relativity	
PHSX 291	Special Topics	
PHSX 311	Oscillations and Waves	
PHSX 320	Classical Mechanics	
PHSX 323	Intermediate Physics Lab	
PHSX 327	Optics	
PHSX 330	Communicating Physics	
PHSX 333	Computational Physics	
PHSX 343	Modern Physics	
PHSX 423	Electricity & Magnetism I	
PHSX 444	Advanced Physics Lab	
PHSX 446	Thermodyn & Stat Mech	
PHSX 461	Quantum Mechanics I	
PHSX 462	Quantum Mechanics II	
Total Hours		11

Course List

Minimum Required Grade: C-

Teaching Physics Track

Notes:

- This teaching track contains different/additional course requirements designed to meet state standards. Those interested in teaching in K-12 schools must complete the teaching track of a major in a teaching content area plus the Teacher Education Program through the Department of Teaching and Learning. Additional teaching areas can be added through completion of the teaching track of a major or minor in that content area.
  - Secondary Education Licensure Program
  - Licensure Degree Requirements
- To complete this teaching track, you need to contact the Teaching and Learning Department. You do not fill out a major/minor form for graduation or the major/minor/concentration section of the major change form. Approvals for this track must come from the Teaching and

Learning Department.
- Tracks will not appear on your UM transcript, diploma, university lists, student data system, or university publications. They are used for advising purposes only. You do not fill out a major change for a track.
- Individuals completing the teaching track of this minor must also complete the teaching track of a major in another teaching content area.

Teaching Physics Track Requirements:

Note: The EDU 497 course number is used for multiple courses. Students should register for EDU 497 Methods: 5-12 Science.

CODE	TITLE	HOURS
Complete the following course		
EDU 497	Teaching and Assessing	4
Total Hours		4

Course List

Minimum Required Grade: C-

Secondary Teaching Licensure

Note: For endorsement to teach physics, a student also must gain admission to the Teacher Education Program and meet all the requirements for secondary teaching licensure. For more information, see the Teaching and Learning Department.

Political Science Department < University of Montana

Political Science Department

- Overview
- Programs

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 a concentration in one of the following: American politics, international relations and comparative politics, public administration and public policy, 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 and public policy; (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.

Undergraduate

- Political Science B.A.
- Political Science B.A., American Politics Concentration
- Political Science B.A., International Relations & Comparative Politics Concentration
- Political Science B.A., Public Administration and Public Policy Concentration
- Political Science B.A., Public Law Concentration

Undergraduate Minors

- Global Public Health
- Political Science

Graduate

- Political Science M.A.

Political Science B.A. < University of Montana

Political Science B.A.

Bachelor of Arts - Political Science

College of Humanities & Sciences

Degree Specific Credits: 37

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

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 PSCI 492 and PSCI 498 combined may count toward the 37 required credits.
- A maximum of 60 PSCI credits can count towards the Political Science Major. An internship is strongly recommended.

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

CODE	TITLE	HOURS
Lower-Division Required Courses		12
Upper-Division Writing		1
Required Upper-Division Field Courses		12
Public Administration and Public Policy		
Political Theory		
Comparative Government		
International Relations		
American Politics		
Degree Electives		12
Teaching Government Track		
Total Hours		37

Course List

Lower-Division Required Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
PSCI 210S	Intro to American Government	3
PSCI 220S	Intro to Comparative Government	3
PSCI 230X	Intro to International Relations	3
PSCI 250E	Intro to Political Theory	3
Total Hours		12

Course List

Minimum Required Grade: C-

Upper-Division Writing

CODE	TITLE	HOURS
Complete the following course:		
PSCI 400	Adv Writing in Pol Science	1
Total Hours		1

Course List

Minimum Required Grade: C-

Required Upper Division Field Courses

Rule: Complete one upper-division course in four of the five fields listed below -- 12 total credits required. Any field course can also be counted toward a Political Science concentration.

Public Administration and Public Policy

CODE	TITLE	HOURS
Complete 3 credits from the following courses:		3
NPAD 466	Nonprofit Adm & Pub Svc	
NPAD 467	Advanced Nonprofit Admin	
PSCI 335	American Foreign Policy	
PSCI 344	State and Local Government	
PSCI 349	Montana Government and Politics	
PSCI 360	Exp Offering: Public Admin	
PSCI 361	Public Administration	
PSCI 365	Pub Policy Issues and Analysis	
PSCI 448	Health Care Policy	
PSCI 460	Exp Offering: Public Admin	
PSCI 461	Administrative Law	
PSCI 462	Human Resource Management	
PSCI 463	Development Administration	
PSCI 468		
PSCI 469	Ethics and Public Policy	
Total Hours		3

Course List

Minimum Required Grade: C-

Political Theory

CODE	TITLE	HOURS
Complete 3 credits from the following courses:		3
PSCI 350	Exp Offering: Political Theory	
PSCI 352	American Political Thought	
PSCI 354	Contemp Issues in Pol Theory	
PSCI 357	Ancient & Medieval Pol Phil	
PSCI 450	Exp Offering: Political Theory	
PSCI 452	Utopianism and its Critics	
PSCI 453	Modern Political Theory	
Total Hours		3

Course List

Minimum Required Grade: C-

Comparative Government

CODE	TITLE	HOURS
Complete 3 credits from the following courses:		3
NASX 475	Tribal Sovereignty	
PSCI 311	Rev & Reform Modern China	
PSCI 320	Exp Offering: Comp Politics	
PSCI 322	Politics of Europe	
PSCI 324	Climate Policies: China & U.S.	
PSCI 325	Politics of Latin America	
PSCI 326	Politics of Africa	
PSCI 327	Politics of Mexico	
PSCI 328	Politics of China	
PSCI 420	Exp Offering: Comp Politics	
PSCI 381	State Formation	
PSCI 443	Politics of Social Movements	
PSCI 456	Chinese Polit & Soc Thought	
PSCI 481	Origins of Democracy and Authoritarianism	
Total Hours		3

Course List

Minimum Required Grade: C-

International Relations

CODE	TITLE	HOURS
Complete 3 credits from the following courses:		3
PSCI 330	Exp Offering: Intrnt Relations	
PSCI 332	Global Environmental Pol.	
PSCI 334	International Security	
PSCI 335	American Foreign Policy	
PSCI 336	European Union	
PSCI 337	Model United Nations	
PSCI 430	Exp Offering: Intrnt Relations	
PSCI 431	Politics of Global Migration	
PSCI 433	International Law & Org	
PSCI 463	Development Administration	
PSCI 482	Politics of the World Economy	
Total Hours		3

Course List

Minimum Required Grade: C-

American Politics

CODE	TITLE	HOURS
Complete 3 credits from the following courses:		3
PSCI 335	American Foreign Policy	
PSCI 340	Exp Offering: American Govt	
PSCI 341	Political Parties and Election	
PSCI 342	Media, Public Opinion, Polling	
PSCI 344	State and Local Government	
PSCI 345	American Political System	
PSCI 348	US Multicultural Politics	
PSCI 349	Montana Government and Politics	
PSCI 352	American Political Thought	
PSCI 365	Pub Policy Issues and Analysis	
PSCI 370	Courts and Judicial Politics	
PSCI 440	Exp Offering: American Govt	
PSCI 443	Politics of Social Movements	
PSCI 444	Am Political Participation	
PSCI 445	Political Psychology	
PSCI 448	Health Care Policy	
PSCI 468		
PSCI 471	American Constitutional Law	
PSCI 474	Civil Rights	
Total Hours		3

Course List

Minimum Required Grade: C-

Degree Electives

Note: PSCI courses may only count toward one category of requirements.

CODE	TITLE	HOURS
Complete twelve additional elective credits from PSCI courses numbered 300 and above.		12
Total Hours		12

Course List

Minimum Required Grade: C-

Teaching Government Track

Notes:

- This teaching track contains different/additional course requirements designed to meet state standards. Those interested in teaching in K-12

schools must complete the teaching track of a major in a teaching content area plus the Teacher Education Program through the Department of Teaching and Learning. Additional teaching areas can be added through completion of the teaching track of a major or minor in that content area.
    - Secondary Education Licensure Program
    - Licensure Degree Requirements
- To complete this teaching track, you need to contact the Teaching and Learning Department. You do not fill out a major/minor form for graduation or the major/minor/concentration section of the major change form. Approvals for this track must come from the Teaching and Learning Department.
- Tracks will not appear on your UM transcript, diploma, university lists, student data system, or university publications. They are used for advising purposes only. You do not fill out a major change for a track.

Teaching Government Track Requirements

CODE	TITLE	HOURS
Complete the following course:		
EDU 497	Teaching and Assessing	4
Total Hours		4

Course List

Minimum Required Grade: C-

Secondary Teaching Licensure

Note: For endorsement to teach government, a student also must gain admission to the Teacher Education Program and meet all the requirements for secondary teaching licensure. For more information, see the Teaching and Learning Department.

Political Science B.A. - American Politics < University of Montana

Political Science B.A. - American Politics

Bachelor of Arts - Political Science; American Politics Concentration

College of Humanities & Sciences

Degree Specific Credits: 37

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Notes: Students majoring in Political Science with a concentration in American Politics option 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 PSCI 492 and PSCI 498 combined may count toward the 37 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 an upper-division field requirement and the degree electives for the concentration, but they cannot double-count the course credits.

An internship is strongly recommended.

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

CODE	TITLE	HOURS
Lower-Division Required Courses		12
Upper-Division Required Courses		1
Degree Electives		12
Required Upper-Division Field Courses		12
Public Administration and Public Policy		
Political Theory		
Comparative Government		
International Relations		
American Politics		
Total Hours		37

Course List

Lower-Division Required Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
PSCI 210S	Intro to American Government	3
PSCI 220S	Intro to Comparative Government	3
PSCI 230X	Intro to International Relations	3
PSCI 250E	Intro to Political Theory	3
Total Hours		12

Course List

Minimum Required Grade: C-

Upper-Division Required Courses

CODE	TITLE	HOURS
Complete the following course:		
PSCI 400	Adv Writing in Pol Science	1
Total Hours		1

Course List

Minimum Required Grade: C-

Degree Electives

CODE	TITLE	HOURS
Complete four of the following courses:		12
PSCI 335	American Foreign Policy	
PSCI 340	Exp Offering: American Govt	
PSCI 341	Political Parties and Election	
PSCI 342	Media, Public Opinion, Polling	
PSCI 344	State and Local Government	
PSCI 345	American Political System	
PSCI 348	US Multicultural Politics	
PSCI 349	Montana Government and Politics	
PSCI 352	American Political Thought	
PSCI 365	Pub Policy Issues and Analysis	
PSCI 370	Courts and Judicial Politics	
PSCI 440	Exp Offering: American Govt	
PSCI 443	Politics of Social Movements	
PSCI 444	Am Political Participation	
PSCI 445	Political Psychology	
PSCI 448	Health Care Policy	
PSCI 468		
PSCI 471	American Constitutional Law	
PSCI 474	Civil Rights	
Total Hours		12

Course List

Minimum Required Grade: C-

Required Upper-Division Field Courses

Rule: Complete one upper-division course in four of the five fields listed below -- 12 total credits required. Any field course can also be counted toward a Political Science concentration.

Public Administration and Public Policy

CODE	TITLE	HOURS
Complete 3 credits from the following courses:		3
NPAD 466	Nonprofit Adm & Pub Svc	
NPAD 467	Advanced Nonprofit Admin	
PSCI 335	American Foreign Policy	
PSCI 344	State and Local Government	
PSCI 360	Exp Offering: Public Admin	
PSCI 361	Public Administration	
PSCI 365	Pub Policy Issues and Analysis	
PSCI 448	Health Care Policy	
PSCI 349	Montana Government and Politics	
PSCI 460	Exp Offering: Public Admin	
PSCI 461	Administrative Law	
PSCI 462	Human Resource Management	
PSCI 463	Development Administration	
PSCI 468		
PSCI 469	Ethics and Public Policy	
Total Hours		3

Course List

Minimum Required Grade: C-

Political Theory

CODE	TITLE	HOURS
Complete 3 credits from the following courses:		3
PSCI 350	Exp Offering: Political Theory	
PSCI 352	American Political Thought	
PSCI 354	Contemp Issues in Pol Theory	
PSCI 357	Ancient & Medieval Pol Phil	
PSCI 450	Exp Offering: Political Theory	
PSCI 452	Utopianism and its Critics	
PSCI 453	Modern Political Theory	
Total Hours		3

Course List

Minimum Required Grade: C-

Comparative Government

CODE	TITLE	HOURS
Complete 3 credits from the following courses:		3
NASX 475	Tribal Sovereignty	
PSCI 311	Rev & Reform Modern China	
PSCI 320	Exp Offering: Comp Politics	
PSCI 322	Politics of Europe	
PSCI 324	Climate Policies: China & U.S.	
PSCI 325	Politics of Latin America	
PSCI 326	Politics of Africa	
PSCI 327	Politics of Mexico	
PSCI 328	Politics of China	
PSCI 381	State Formation	
PSCI 420	Exp Offering: Comp Politics	
PSCI 443	Politics of Social Movements	
PSCI 456	Chinese Polit & Soc Thought	
PSCI 481	Origins of Democracy and Authoritarianism	
Total Hours		3

Course List

Minimum Required Grade: C-

International Relations

CODE	TITLE	HOURS
Complete 3 credits from the following courses:		3
PSCI 330	Exp Offering: Intrnt Relations	
PSCI 332	Global Environmental Pol.	
PSCI 334	International Security	
PSCI 335	American Foreign Policy	
PSCI 336	European Union	
PSCI 337	Model United Nations	
PSCI 430	Exp Offering: Intrnt Relations	
PSCI 431	Politics of Global Migration	
PSCI 433	International Law & Org	
PSCI 463	Development Administration	
PSCI 482	Politics of the World Economy	
Total Hours		3

Course List

Minimum Required Grade: C-

American Politics

CODE	TITLE	HOURS
Complete 3 credits from the following courses:		3
PSCI 335	American Foreign Policy	
PSCI 340	Exp Offering: American Govt	
PSCI 341	Political Parties and Election	
PSCI 342	Media, Public Opinion, Polling	
PSCI 344	State and Local Government	
PSCI 345	American Political System	
PSCI 348	US Multicultural Politics	
PSCI 349	Montana Government and Politics	
PSCI 352	American Political Thought	
PSCI 365	Pub Policy Issues and Analysis	
PSCI 370	Courts and Judicial Politics	
PSCI 440	Exp Offering: American Govt	
PSCI 443	Politics of Social Movements	
PSCI 444	Am Political Participation	
PSCI 445	Political Psychology	
PSCI 448	Health Care Policy	
PSCI 468		
PSCI 471	American Constitutional Law	
PSCI 474	Civil Rights	
Total Hours		3

Course List

Minimum Required Grade: C-

Political Science B.A. - International Relations and Comparative Politics < University of Montana

Political Science B.A. - International Relations and Comparative Politics

Bachelor of Arts - Political Science; International Relations & Comparative Politics Concentration

College of Humanities & Sciences

Degree Specific Credits: 37

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: Students majoring in Political Science with an concentration in International Relations and Comparative Politics 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 PSCI 492 and PSCI 498 combined may count toward the 37 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 an upper-division field requirement and the degree electives for the concentration, but they cannot double-count the course credits.

Two years of a foreign language study and/or a study-abroad program is strongly recommended.

An internship is also recommended.

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

CODE	TITLE	HOURS
Lower-Division Required Courses		12
Upper-Division Required Course		1
Degree Electives		12
Required Upper Division Field Courses		12
Public Administration and Public Policy		
Political Theory		
Comparative Government		
International Relations		
American Politics		
Total Hours		37

Course List

Lower-Division Required Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
PSCI 210S	Intro to American Government	3
PSCI 220S	Intro to Comparative Government	3
PSCI 230X	Intro to International Relations	3
PSCI 250E	Intro to Political Theory	3
Total Hours		12

Course List

Minimum Required Grade: C-

Upper-Division Required Course

CODE	TITLE	HOURS
Complete the following course:		
PSCI 400	Adv Writing in Pol Science	1
Total Hours		1

Course List

Minimum Required Grade: C-

Degree Electives

CODE	TITLE	HOURS
Complete 4 of the following courses:		12
PSCI 311	Rev & Reform Modern China	
PSCI 320	Exp Offering: Comp Politics	
PSCI 322	Politics of Europe	
PSCI 324	Climate Policies: China & U.S.	
PSCI 325	Politics of Latin America	
PSCI 326	Politics of Africa	
PSCI 327	Politics of Mexico	
PSCI 328	Politics of China	
PSCI 330	Exp Offering: Intrnt Relations	
PSCI 332	Global Environmental Pol.	
PSCI 334	International Security	
PSCI 335	American Foreign Policy	
PSCI 336	European Union	
PSCI 337	Model United Nations	
PSCI 381	State Formation	
PSCI 420	Exp Offering: Comp Politics	
PSCI 430	Exp Offering: Intrnt Relations	
PSCI 431	Politics of Global Migration	
PSCI 433	International Law & Org	
PSCI 443	Politics of Social Movements	
PSCI 456	Chinese Polit & Soc Thought	
PSCI 463	Development Administration	
PSCI 481	Origins of Democracy and Authoritarianism	
PSCI 482	Politics of the World Economy	
Total Hours		12

Course List

Minimum Required Grade: C-

Required Upper-Division Field Courses

Rule: Complete one upper-division course in four of the five fields listed below. 12 total credits required. Any field course can also be counted toward a Political Science concentration.

Public Administration and Public Policy

CODE	TITLE	HOURS
Complete 3 credits from the following courses:		3
NPAD 466	Nonprofit Adm & Pub Svc	
NPAD 467	Advanced Nonprofit Admin	
PSCI 335	American Foreign Policy	
PSCI 344	State and Local Government	
PSCI 349	Montana Government and Politics	
PSCI 360	Exp Offering: Public Admin	
PSCI 361	Public Administration	
PSCI 365	Pub Policy Issues and Analysis	
PSCI 442	Environmental Policy	
PSCI 448	Health Care Policy	
PSCI 460	Exp Offering: Public Admin	
PSCI 461	Administrative Law	
PSCI 462	Human Resource Management	
PSCI 463	Development Administration	
PSCI 468		
PSCI 469	Ethics and Public Policy	
Total Hours		3

Course List

Minimum Required Grade: C-

Political Theory

CODE	TITLE	HOURS
Complete 3 credits from the following courses:		3
PSCI 350	Exp Offering: Political Theory	
PSCI 352	American Political Thought	
PSCI 354	Contemp Issues in Pol Theory	
PSCI 357	Ancient & Medieval Pol Phil	
PSCI 450	Exp Offering: Political Theory	
PSCI 452	Utopianism and its Critics	
PSCI 453	Modern Political Theory	
Total Hours		3

Course List

Minimum Required Grade: C-

Comparative Government

CODE	TITLE	HOURS
Complete 3 credits from the following courses:		3
NASX 475	Tribal Sovereignty	
PSCI 311	Rev & Reform Modern China	
PSCI 320	Exp Offering: Comp Politics	
PSCI 322	Politics of Europe	
PSCI 324	Climate Policies: China & U.S.	
PSCI 325	Politics of Latin America	
PSCI 326	Politics of Africa	
PSCI 327	Politics of Mexico	
PSCI 328	Politics of China	
PSCI 381	State Formation	
PSCI 420	Exp Offering: Comp Politics	
PSCI 443	Politics of Social Movements	
PSCI 456	Chinese Polit & Soc Thought	
PSCI 481	Origins of Democracy and Authoritarianism	
Total Hours		3

Course List

Minimum Required Grade: C-

International Relations

CODE	TITLE	HOURS
Complete 3 credits from the following courses:		3
PSCI 330	Exp Offering: Intrnt Relations	
PSCI 332	Global Environmental Pol.	
PSCI 334	International Security	
PSCI 335	American Foreign Policy	
PSCI 336	European Union	
PSCI 337	Model United Nations	
PSCI 430	Exp Offering: Intrnt Relations	
PSCI 431	Politics of Global Migration	
PSCI 433	International Law & Org	
PSCI 463	Development Administration	
PSCI 482	Politics of the World Economy	
Total Hours		3

Course List

Minimum Required Grade: C-

American Politics

CODE	TITLE	HOURS
Complete 3 credits from the following courses:		3
PSCI 335	American Foreign Policy	
PSCI 340	Exp Offering: American Govt	
PSCI 341	Political Parties and Election	
PSCI 342	Media, Public Opinion, Polling	
PSCI 344	State and Local Government	
PSCI 345	American Political System	
PSCI 348	US Multicultural Politics	
PSCI 349	Montana Government and Politics	
PSCI 352	American Political Thought	
PSCI 365	Pub Policy Issues and Analysis	
PSCI 370	Courts and Judicial Politics	
PSCI 440	Exp Offering: American Govt	
PSCI 443	Politics of Social Movements	
PSCI 444	Am Political Participation	
PSCI 445	Political Psychology	
PSCI 448	Health Care Policy	
PSCI 468		
PSCI 471	American Constitutional Law	
PSCI 474	Civil Rights	
Total Hours		3

Course List

Minimum Required Grade: C-

Political Science B.A. - Public Administration and Public Policy < University of Montana

Political Science B.A. - Public Administration and Public Policy

Bachelor of Arts - Political Science; Public Administration and Public Policy Concentration

College of Humanities & Sciences

Degree Specific Credits: 37

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: Students majoring in Political Science with an concentration in Public Administration and Public Policy 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 PSCI 492 and PSCI 498 combined may count toward the 37 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 an upper-division field requirement and the degree electives for the concentration, but they cannot double-count the course credits.

A legislative or administrative internship is strongly recommended.

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

CODE	TITLE	HOURS
Lower-Division Required Courses		12
Upper-Division Required Courses		1
Degree Electives		12
Required-Upper Division Field Courses		12
Public Administration and Public Policy		
Political Theory		
Comparative Government		
International Relations		
American Politics		
Total Hours		37

Course List

Lower-Division Required Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
PSCI 210S	Intro to American Government	3
PSCI 220S	Intro to Comparative Government	3
PSCI 230X	Intro to International Relations	3
PSCI 250E	Intro to Political Theory	3
Total Hours		12

Course List

Minimum Required Grade: C-

Upper-Division Required Courses

CODE	TITLE	HOURS
Complete the following course:		
PSCI 400	Adv Writing in Pol Science	1
Total Hours		1

Course List

Minimum Required Grade: C-

Degree Electives

CODE	TITLE	HOURS
Complete four of the following courses:		12
NPAD 466	Nonprofit Adm & Pub Svc	
NPAD 467	Advanced Nonprofit Admin	
PSCI 335	American Foreign Policy	
PSCI 344	State and Local Government	
PSCI 349	Montana Government and Politics	
PSCI 360	Exp Offering: Public Admin	
PSCI 361	Public Administration	
PSCI 365	Pub Policy Issues and Analysis	
PSCI 442	Environmental Policy	
PSCI 448	Health Care Policy	
PSCI 460	Exp Offering: Public Admin	
PSCI 461	Administrative Law	
PSCI 462	Human Resource Management	
PSCI 463	Development Administration	
PSCI 468		
PSCI 469	Ethics and Public Policy	
Total Hours		12

Course List

Minimum Required Grade: C-

Required Upper-Division Field Courses

Rule: Complete one upper-division course in four of the five fields listed below -- 12 total credits required. Any field course can also be counted toward a Political Science concentration.

Public Administration and Public Policy

CODE	TITLE	HOURS
Complete 3 credits from the following courses:		3
NPAD 466	Nonprofit Adm & Pub Svc	
NPAD 467	Advanced Nonprofit Admin	
PSCI 335	American Foreign Policy	
PSCI 344	State and Local Government	
PSCI 349	Montana Government and Politics	
PSCI 360	Exp Offering: Public Admin	
PSCI 361	Public Administration	
PSCI 365	Pub Policy Issues and Analysis	
PSCI 442	Environmental Policy	
PSCI 448	Health Care Policy	
PSCI 460	Exp Offering: Public Admin	
PSCI 461	Administrative Law	
PSCI 462	Human Resource Management	
PSCI 463	Development Administration	
PSCI 468		
PSCI 469	Ethics and Public Policy	
Total Hours		3

Course List

Minimum Required Grade: C-

Political Theory

CODE	TITLE	HOURS
Complete 3 credits from the following courses:		3
PSCI 350	Exp Offering: Political Theory	
PSCI 352	American Political Thought	
PSCI 354	Contemp Issues in Pol Theory	
PSCI 357	Ancient & Medieval Pol Phil	
PSCI 450	Exp Offering: Political Theory	
PSCI 452	Utopianism and its Critics	
PSCI 453	Modern Political Theory	
Total Hours		3

Course List

Minimum Required Grade: C-

Comparative Government

CODE	TITLE	HOURS
Complete 3 credits from the following courses:		3
NASX 475	Tribal Sovereignty	
PSCI 311	Rev & Reform Modern China	
PSCI 320	Exp Offering: Comp Politics	
PSCI 322	Politics of Europe	
PSCI 324	Climate Policies: China & U.S.	
PSCI 325	Politics of Latin America	
PSCI 326	Politics of Africa	
PSCI 327	Politics of Mexico	
PSCI 328	Politics of China	
PSCI 381	State Formation	
PSCI 420	Exp Offering: Comp Politics	
PSCI 443	Politics of Social Movements	
PSCI 456	Chinese Polit & Soc Thought	
PSCI 481	Origins of Democracy and Authoritarianism	
Total Hours		3

Course List

Minimum Required Grade: C-

International Relations

CODE	TITLE	HOURS
Complete 3 credits from the following courses:		3
PSCI 330	Exp Offering: Intrnt Relations	
PSCI 332	Global Environmental Pol.	
PSCI 334	International Security	
PSCI 335	American Foreign Policy	
PSCI 336	European Union	
PSCI 337	Model United Nations	
PSCI 430	Exp Offering: Intrnt Relations	
PSCI 431	Politics of Global Migration	
PSCI 433	International Law & Org	
PSCI 463	Development Administration	
PSCI 482	Politics of the World Economy	
Total Hours		3

Course List

Minimum Required Grade: C-

American Politics

CODE	TITLE	HOURS
Complete 3 credits from the following courses:		3
PSCI 335	American Foreign Policy	
PSCI 340	Exp Offering: American Govt	
PSCI 341	Political Parties and Election	
PSCI 342	Media, Public Opinion, Polling	
PSCI 344	State and Local Government	
PSCI 345	American Political System	
PSCI 348	US Multicultural Politics	
PSCI 349	Montana Government and Politics	
PSCI 352	American Political Thought	
PSCI 365	Pub Policy Issues and Analysis	
PSCI 370	Courts and Judicial Politics	
PSCI 440	Exp Offering: American Govt	
PSCI 443	Politics of Social Movements	
PSCI 444	Am Political Participation	
PSCI 445	Political Psychology	
PSCI 448	Health Care Policy	
PSCI 468		
PSCI 471	American Constitutional Law	
PSCI 474	Civil Rights	
Total Hours		3

Course List

Minimum Required Grade: C-

University Of Montana

Political Science B.A. - Public Law

Bachelor of Arts - Political Science; Public Law Concentration

College of Humanities & Sciences

Degree Specific Credits: 37

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: Students majoring in Political Science with an concentration in Public Law 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 PSCI 492 and PSCI 498 combined may count toward the 37 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 an upper-division field requirement and the degree electives for the concentration requirements, but they cannot double-count the course credits.

An internship is strongly recommended.

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

Course List		
CODE	**TITLE**	**HOURS**
Lower-Division Required Courses		12
Upper-Division Required Courses		1
Degree Electives		12
Required Upper-Division Field Courses		12
Public Administration and Public Policy		
Political Theory		
Comparative Government		
International Relations		
American Politics		
Total Hours		37

Lower-Division Required Courses

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
PSCI 210S	Intro to American Government	3
PSCI 220S	Intro to Comparative Government	3
PSCI 230X	Intro to International Relations	3
PSCI 250E	Intro to Political Theory	3
Total Hours		12

Minimum Required Grade: C-

Upper-Division Required Courses

Course List		
CODE	**TITLE**	**HOURS**
Complete the following course:		
PSCI 400	Adv Writing in Pol Science	1
Total Hours		1

Minimum Required Grade: C-

Degree Electives

		Course List
CODE	**TITLE**	**HOURS**
Complete four of the following courses:		12
NASX 475	Tribal Sovereignty	
PSCI 352	American Political Thought	
PSCI 370	Courts and Judicial Politics	
PSCI 433	International Law & Org	
PSCI 461	Administrative Law	
PSCI 462	Human Resource Management	
PSCI 471	American Constitutional Law	
PSCI 474	Civil Rights	
Total Hours		12

Minimum Required Grade: C-

Required Upper Division Field Courses

Rule: Complete one upper-division course in four of the five fields listed below -- 12 total credits required. Any field course can also be counted toward a Political Science concentration.

Public Administration and Public Policy

Course List		
CODE	**TITLE**	**HOURS**
Complete 3 credits from the following courses:		3
NPAD 466	Nonprofit Adm & Pub Svc	
NPAD 467	Advanced Nonprofit Admin	
PSCI 335	American Foreign Policy	
PSCI 344	State and Local Government	
PSCI 349	Montana Government and Politics	
PSCI 360	Exp Offering: Public Admin	
PSCI 361	Public Administration	
PSCI 365	Pub Policy Issues and Analysis	
PSCI 442	Environmental Policy	
PSCI 448	Health Care Policy	
PSCI 460	Exp Offering: Public Admin	
PSCI 461	Administrative Law	
PSCI 462	Human Resource Management	
PSCI 463	Development Administration	
PSCI 468		
PSCI 469	Ethics and Public Policy	
Total Hours		3

Minimum Required Grade: C-

Political Theory

Course List		
CODE	**TITLE**	**HOURS**
Complete 3 credits from the following courses:		3
PSCI 350	Exp Offering: Political Theory	
PSCI 352	American Political Thought	
PSCI 354	Contemp Issues in Pol Theory	
PSCI 357	Ancient & Medieval Pol Phil	
PSCI 450	Exp Offering: Political Theory	
PSCI 452	Utopianism and its Critics	
PSCI 453	Modern Political Theory	
Total Hours		3

Minimum Required Grade: C-

Comparative Government

Course List		
CODE	**TITLE**	**HOURS**
Complete 3 credits from the following courses:		3
NASX 475	Tribal Sovereignty	
PSCI 311	Rev & Reform Modern China	
PSCI 320	Exp Offering: Comp Politics	
PSCI 322	Politics of Europe	
PSCI 324	Climate Policies: China & U.S.	
PSCI 325	Politics of Latin America	
PSCI 326	Politics of Africa	
PSCI 327	Politics of Mexico	
PSCI 328	Politics of China	
PSCI 381	State Formation	
PSCI 420	Exp Offering: Comp Politics	
PSCI 443	Politics of Social Movements	
PSCI 456	Chinese Polit & Soc Thought	
PSCI 481	Origins of Democracy and Authoritarianism	
Total Hours		3

Minimum Required Grade: C-

International Relations

Course List		
CODE	**TITLE**	**HOURS**
Complete 3 credits from the following courses:		3
PSCI 330	Exp Offering: Intrnt Relations	
PSCI 332	Global Environmental Pol.	
PSCI 334	International Security	
PSCI 335	American Foreign Policy	
PSCI 336	European Union	
PSCI 337	Model United Nations	
PSCI 430	Exp Offering: Intrnt Relations	
PSCI 431	Politics of Global Migration	
PSCI 433	International Law & Org	
PSCI 463	Development Administration	
PSCI 482	Politics of the World Economy	
Total Hours		3

Minimum Required Grade: C-

American Politics

Course List		
CODE	**TITLE**	**HOURS**
Complete 3 credits from the following courses:		3
PSCI 335	American Foreign Policy	
PSCI 340	Exp Offering: American Govt	
PSCI 341	Political Parties and Election	
PSCI 342	Media, Public Opinion, Polling	
PSCI 344	State and Local Government	
PSCI 345	American Political System	
PSCI 348	US Multicultural Politics	
PSCI 349	Montana Government and Politics	
PSCI 352	American Political Thought	
PSCI 365	Pub Policy Issues and Analysis	
PSCI 370	Courts and Judicial Politics	
PSCI 440	Exp Offering: American Govt	
PSCI 443	Politics of Social Movements	
PSCI 444	Am Political Participation	
PSCI 445	Political Psychology	
PSCI 448	Health Care Policy	
PSCI 468		
PSCI 471	American Constitutional Law	
PSCI 474	Civil Rights	
Total Hours		3

Minimum Required Grade: C-

Political Science Minor < University of Montana

Political Science Minor

Minor - Political Science

College of Humanities & Sciences

Degree Specific Credits: 21

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: Nine of the 21 required credits must be in 300-400-level courses.

CODE	TITLE	HOURS
Lower-Division Required Courses		12
Required Upper-Division Field Courses		9
Public Administration and Public Policy		
Political Theory		
Comparative Government		
International Relations		
American Politics		
Teaching Government Track		
Total Hours		21

Course List

Lower-Division Required Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
PSCI 210S	Intro to American Government	3
PSCI 220S	Intro to Comparative Government	3
PSCI 230X	Intro to International Relations	3
PSCI 250E	Intro to Political Theory	3
Total Hours		12

Course List

Minimum Required Grade: C-

Required Upper Division Field Courses

Rule: Must complete 1 course in 3 of the 5 following categories. 9 total credits required.

Public Administration and Public Policy

CODE	TITLE	HOURS
Complete 3 credits from the following courses:		3
NPAD 466	Nonprofit Adm & Pub Svc	
NPAD 467	Advanced Nonprofit Admin	
PSCI 335	American Foreign Policy	
PSCI 344	State and Local Government	
PSCI 349	Montana Government and Politics	
PSCI 360	Exp Offering: Public Admin	
PSCI 361	Public Administration	
PSCI 365	Pub Policy Issues and Analysis	
PSCI 448	Health Care Policy	
PSCI 460	Exp Offering: Public Admin	
PSCI 461	Administrative Law	
PSCI 462	Human Resource Management	
PSCI 463	Development Administration	
PSCI 468		
PSCI 469	Ethics and Public Policy	
Total Hours		3

Course List

Minimum Required Grade: C-

Political Theory

CODE	TITLE	HOURS
Complete 3 credits from the following courses:		3
PSCI 350	Exp Offering: Political Theory	
PSCI 352	American Political Thought	
PSCI 354	Contemp Issues in Pol Theory	
PSCI 357	Ancient & Medieval Pol Phil	
PSCI 450	Exp Offering: Political Theory	
PSCI 452	Utopianism and its Critics	
PSCI 453	Modern Political Theory	
Total Hours		3

Course List

Minimum Required Grade: C-

Comparative Government

CODE	TITLE	HOURS
Complete 3 credits from the following courses:		3
PSCI 311	Rev & Reform Modern China	
PSCI 320	Exp Offering: Comp Politics	
PSCI 322	Politics of Europe	
PSCI 324	Climate Policies: China & U.S.	
PSCI 325	Politics of Latin America	
PSCI 326	Politics of Africa	
PSCI 327	Politics of Mexico	
PSCI 328	Politics of China	
PSCI 381	State Formation	
PSCI 420	Exp Offering: Comp Politics	
PSCI 443	Politics of Social Movements	
PSCI 456	Chinese Polit & Soc Thought	
PSCI 481	Origins of Democracy and Authoritarianism	
Total Hours		3

Course List

Minimum Required Grade: C-

International Relations

CODE	TITLE	HOURS
Complete 3 credits from the following courses:		3
PSCI 330	Exp Offering: Intrnt Relations	
PSCI 332	Global Environmental Pol.	
PSCI 334	International Security	
PSCI 335	American Foreign Policy	
PSCI 336	European Union	
PSCI 337	Model United Nations	
PSCI 430	Exp Offering: Intrnt Relations	
PSCI 431	Politics of Global Migration	
PSCI 433	International Law & Org	
PSCI 463	Development Administration	
PSCI 482	Politics of the World Economy	
Total Hours		3

Course List

Minimum Required Grade: C-

American Politics

CODE	TITLE	HOURS
Complete 3 credits from the following courses:		3
PSCI 335	American Foreign Policy	
PSCI 340	Exp Offering: American Govt	
PSCI 341	Political Parties and Election	
PSCI 342	Media, Public Opinion, Polling	
PSCI 344	State and Local Government	
PSCI 345	American Political System	
PSCI 348	US Multicultural Politics	
PSCI 349	Montana Government and Politics	
PSCI 352	American Political Thought	
PSCI 365	Pub Policy Issues and Analysis	
PSCI 370	Courts and Judicial Politics	
PSCI 440	Exp Offering: American Govt	
PSCI 443	Politics of Social Movements	
PSCI 444	Am Political Participation	
PSCI 445	Political Psychology	
PSCI 448	Health Care Policy	
PSCI 468		
PSCI 471	American Constitutional Law	
PSCI 474	Civil Rights	
Total Hours		3

Course List

Minimum Required Grade: C-

Teaching Government Track

Notes:

- This teaching track contains different/additional course requirements designed to meet state standards. Those interested in teaching in K-12 schools must complete the teaching track of a major in a teaching content area plus the Teacher Education Program through the Department of Teaching and Learning. Additional teaching areas can be added through completion of the teaching track of a major or minor in that content area.
  - Secondary Education Licensure Program
  - Licensure Degree Requirements
- To complete this teaching track, you need to contact the Teaching and Learning Department. You do not fill out a major/minor form for graduation or the major/minor/concentration section of the major change form. Approvals for this track must come from the Teaching and Learning Department.
- Tracks will not appear on your UM transcript, diploma, university lists, student data system, or university publications. They are used for

advising purposes only. You do not fill out a major change for a track.
- Individuals completing the teaching track of this minor must also complete the teaching track of a major in another teaching content area.

Teaching Government Track Requirement

Note: The EDU 497 course number is used for multiple courses. Students should register for EDU 497 Methods: 5-12 Social Studies.

CODE	TITLE	HOURS
Complete the following course:		
EDU 497	Teaching and Assessing	4
Total Hours		4

Course List

Minimum Required Grade: C-

Secondary Teaching Licensure

Note: For endorsement to teach government, a student also must gain admission to the Teacher Education Program and meet all the requirements for secondary teaching licensure. For more information, see the Teaching and Learning Department.

Psychology Department < University of Montana

Psychology Department

- Overview
- Programs

Allen Szalda-Petree, 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, Specialist in School Psychology (SSP), and Doctor of Philosophy degrees.

Undergraduate

- Psychology B.A.
- Neuroscience B.S., Cellular and Molecular Concentration
- Neuroscience B.S., Cognitive Neuroscience Concentration

Undergraduate Minors

- Human and Family Development
- Psychology Minor

University Of Montana

Psychology B.A.

Bachelor of Arts - Psychology

College of Humanities & Sciences

Degree Specific Credits: 45-46

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: A minimum of 60 credits must be in non-psychology courses.

- PSYX 290, PSYX 292, and PSYX 298 are limited to 6 credit hours.
- PSYX 390, PSYX 392 and PSYX 398are limited to 3 credit hours.
- PSYX 330, PSYX 340, PSYX 360, and PSYX 385 may only count once.

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

Course List		
CODE	**TITLE**	**HOURS**
Lower-Division Core Courses		9
Foundation Courses		12
Fundamentals Courses		6
Upper-Division Electives		15
Math Electives		3-4
Teaching Psychology Track		
Total Hours		45-46

Lower-Division Core Courses

		Course List
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
PSYX 100S	Intro to Psychology	3
PSYX 120	Introduction to Psychological Research Methods	3
PSYX 222 or STAT 216	Statistics Requirement	3
Total Hours		9

Minimum Required Grade: C

Foundation Courses

Course List		
CODE	**TITLE**	**HOURS**
Complete four of the following courses:		12
PSYX 233	Fund of Psychology of Aging	
PSYX 330	Child Development	
PSYX 340	Abnormal Psychology	
PSYX 360	Social Psychology	
PSYX 385	Psychology of Personality	
Total Hours		12

Minimum Required Grade: C

Fundamentals Courses

Course List		
CODE	**TITLE**	**HOURS**
Complete two of the following courses:		6
PSYX 250N	Fund of Biological Psychology	
PSYX 270	Fund Psychology of Learning	
PSYX 280	Fund of Memory and Cognition	
Total Hours		6

Minimum Required Grade: C

Upper-Division Electives

Note: May not include PSYX 392, PSYX 398, or PSYX 499.

		Course List
CODE	**TITLE**	**HOURS**
Complete five of the following courses:		15
PSYX 320	Advanced Psychological Research Methods	
PSYX 330	Child Development (may only count once)	
PSYX 340	Abnormal Psychology (may only count once)	
PSYX 345	Child & Adolescent Psych Disorders	
PSYX 348	Psychology of Family Violence	
PSYX 352	Comparative Psychology	
PSYX 356	Human Neuropsychology	
PSYX 360	Social Psychology (may only count once)	
PSYX 362	Multicultural Psychology	
PSYX 376	Principles of Cognitive Behavioral Modification	
PSYX 378	Intro to Clinical Psychology	
PSYX 382	Forensic Psychology	
PSYX 383	Health Psychology	
PSYX 385	Psychology of Personality (may only count once)	
PSYX 390	Adv Supervised Research	
PSYX 391	Special Topics	
PSYX 400	History & System in Psychology	
PSYX 430	Counseling Theories in Context	
PSYX 491	Special Topics	
S W 423	Addiction Studies	
Total Hours		15

Minimum Required Grade: C

Math Electives

Course List		
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		3-4
M 115	Probability and Linear Mathematics	
M 121	College Algebra	
M 151	Precalculus	
M 162	Applied Calculus	
M 171	Calculus I	
Total Hours		3-4

Minimum Required Grade: C

Teaching Psychology Track

Notes:

- This teaching track contains different/additional course requirements designed to meet state standards. Those interested in teaching in K-12 schools must complete the teaching track of a major in a teaching content area plus the Teacher Education Program through the Department of Teaching and Learning. Additional teaching areas can be added through completion of the teaching track of a major or minor in that content area.
    - Secondary Education Licensure Program
    - Licensure Degree Requirements
- To complete this teaching track, you need to contact the Teaching and Learning Department. You do not fill out a major/minor form for graduation or the major/minor/concentration section of the major change form. Approvals for this track must come from the Teaching and Learning Department.
- Tracks will not appear on your UM transcript, diploma, university lists, student data system, or university publications. They are used for advising purposes only. You do not fill out a major change for a track.

Teaching Psychology Track Requirement

Note: The EDU 497 course number is used for multiple courses. Students should register for EDU 497 Methods: 5-12 Social Studies.

Course List		
CODE	**TITLE**	**HOURS**
Complete the following course:		
EDU 497	Teaching and Assessing	4
Total Hours		4

Minimum Required Grade: C

Secondary Teaching Licensure

Note: For endorsement to teach psychology, a student also must gain admission to the Teacher Education Program and meet all the requirements for secondary teaching licensure. For more information, see the Teaching and Learning Department.

Psychology Minor < University of Montana

Psychology Minor

Minor - Psychology

College of Humanities & Sciences

Degree Specific Credits: 21

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Summary

CODE	TITLE	HOURS
Lower-Division Core Requirements		6
Minor Electives		12
Subcategory 1		
Subcategory 2		
Subcategory 3		
Additional Electives		3
Teaching Psychology Track		
Total Hours		21

Course List

Lower-Division Core Requirements

CODE	TITLE	HOURS
Complete all of the following courses:		
PSYX 100S	Intro to Psychology	3
PSYX 120	Introduction to Psychological Research Methods	3
Total Hours		6

Course List

Minimum Required Grade: C

Minor Electives

Rule: Complete the following subcategories, taking at least 6 upper division credits. 12 total credits required.

Subcategory 1

CODE	TITLE	HOURS
Complete one of the following courses:		3
PSYX 330	Child Development	
PSYX 360	Social Psychology	
PSYX 385	Psychology of Personality	
Total Hours		3

Course List

Minimum Required Grade: C

Subcategory 2

CODE	TITLE	HOURS
Complete one of the following courses:		3
PSYX 340	Abnormal Psychology	
PSYX 345	Child & Adolescent Psych Disorders	
PSYX 376	Principles of Cognitive Behavioral Modification	
PSYX 378	Intro to Clinical Psychology	
Total Hours		3

Course List

Minimum Required Grade: C

Subcategory 3

CODE	TITLE	HOURS
Complete two of the following courses:		6
PSYX 250N	Fund of Biological Psychology	
PSYX 270	Fund Psychology of Learning	
PSYX 280	Fund of Memory and Cognition	
PSYX 352	Comparative Psychology	
PSYX 356	Human Neuropsychology	
Total Hours		6

Course List

Minimum Required Grade: C

Additional Elective

CODE	TITLE	HOURS
Complete an additional Psychology elective to achieve 21 credits.		3
Total Hours		3

Course List

Minimum Required Grade: C

Teaching Psychology Track

Notes:

- This teaching track contains different/additional course requirements designed to meet state standards. Those interested in teaching in K-12 schools must complete the teaching track of a major in a teaching content area plus the Teacher Education Program through the Department of Teaching and Learning. Additional teaching areas can be added through completion of the teaching track of a major or minor in that content area.
  - Secondary Education Licensure Program
  - Licensure Degree Requirements
- To complete this teaching track, you need to contact the Teaching and Learning Department. You do not fill out a major/minor form for graduation or the major/minor/concentration section of the major change form. Approvals for this track must come from the Teaching and Learning Department.
- Tracks will not appear on your UM transcript, diploma, university lists, student data system, or university publications. They are used for advising purposes only. You do not fill out a major change for a track.
- Individuals completing the teaching track of this minor must also complete the teaching track of a major in another teaching content area.

Teaching Psychology Track Requirement

Note: The EDU 497 course number is used for multiple courses. Students should register for EDU 497 Methods: 5-12 Social Studies.

CODE	TITLE	HOURS
Complete the following course:		
EDU 497	Teaching and Assessing	4
Total Hours		4

Course List

Minimum Required Grade: C

Secondary Teaching Licensure

Note: For endorsement to teach psychology, a student also must gain admission to the Teacher Education Program and meet all the requirements for secondary teaching licensure. For more information, see the Teaching and Learning Department.

Neuroscience B.S. - Cellular and Molecular Neuroscience < University of Montana

Neuroscience B.S. - Cellular and Molecular Neuroscience

Bachelor of Science - Neuroscience; Cellular and Molecular Concentration

College of Humanities & Sciences

Degree Specific Credits: 76-85

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

CODE	TITLE	HOURS
Biology/Psychology Core Courses		25
Other Required Courses		35-36
Additional Major Courses		15
Intersection Courses		1-9
Total Hours		76-85

Course List

Biology/Psychology Core Courses

Note: BIOH 458 satisfies the Upper Division Writing Requirement for the Major.

CODE	TITLE	HOURS
Complete all of the following courses:		
BIOB 260	Cellular and Molecular Biology	4
BIOB 272	Genetics and Evolution	4
BIOH 280	From Molecules to Mind - Fundamentals of Neuroscience	3
BIOH 380	Cellular and Molecular Neuroscience	3
BIOH 458	Neuroscience Research	4
PSYX 250N	Fund of Biological Psychology	3
Complete one of the following courses:		4
BIOB 160N & BIOB 161N	Principles of Living Systems and Prncpls of Living Systems Lab	
BCH 110 & BCH 111	Intro Biology for Biochemists and Intro Biol for Biochemists Lab	
Total Hours		25

Course List

Minimum Required Grade: C-

Other Required Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
CHMY 141N & CHMY 142N	College Chemistry I and College Chemistry I Lab	5
CHMY 143N & CHMY 144N	College Chemistry II and College Chemistry II Lab	5
CHMY 221	Organic Chemistry I	3
CHMY 222	Organic Chemistry I Lab	2
CHMY 223	Organic Chemistry II	3
M 162	Applied Calculus	4
PHSX 205N & PHSX 206N	College Physics I and College Physics I Laboratory	5
PHSX 207N & PHSX 208N	College Physics II and College Physics II Laboratory	5
Complete one of the following courses:		
STAT 216	Introduction to Statistics	3-4
or PSYX 222	Psychological Statistics	
Total Hours		35-36

Course List

Minimum Required Grade: C-

Additional Major Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
BCH 480	Advanced Biochemistry I	3
BCH 482	Advanced Biochemistry II	3
BIOB 425	Adv Cell & Molecular Biology	3
Total Hours		9

Course List

Minimum Required Grade: C-

CODE	TITLE	HOURS
Complete 3 credits of the following courses:		3
BIOB 301	Developmental Biology	
BIOH 365	Human Anatomy and Physiology for Health Professions I	
BIOL 435	Comparative Animal Physiology	
Total Hours		3

Course List

Minimum Required Grade: C-

CODE	TITLE	HOURS
Complete one of the following courses:		3
BIOB 375	General Genetics	
BIOB 468	Endocrinology	
BIOH 441	CNS Diseases	
BMED 610	Neuropharmacology	
BMED 646	Neurotoxicology	
KIN 330	Motor Learning and Control	
PSYX 356	Human Neuropsychology	
Total Hours		3

Course List

Minimum Required Grade: C-

Intersection Courses

CODE	TITLE	HOURS
Complete one of the following courses:		1-9
BIOE 406	Behavior & Evolution	
DANC 345	New Visions Dance	
ECNS 491	Special Topics (Behavioral/Experimental Economics)	
HTH 430	Health and Mind/Body/Spirit	
PSYX 233	Fund of Psychology of Aging	
Total Hours		1-9

Course List

Minimum Required Grade: C-

Neuroscience B.S. - Cognitive Neuroscience < University of Montana

Neuroscience B.S. - Cognitive Neuroscience

Bachelor of Science - Neuroscience; Cognitive Neuroscience Concentration

College of Humanities & Sciences

Degree Specific Credits: 71-87

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

CODE	TITLE	HOURS
Biology/Psychology Core Courses		25
Other Required Courses		26-33
Mathematics and Physics		
Chemistry		
Additional Major Courses		19-20
Intersection Courses		1-9
Total Hours		71-87

Course List

Biology/Psychology Core Courses

Note: BIOH 458 satisfies the Upper Division Writing Requirement for the major.

CODE	TITLE	HOURS
Complete all of the following courses:		
BIOB 160N & BIOB 161N	Principles of Living Systems and Prncpls of Living Systems Lab	4
BIOB 260	Cellular and Molecular Biology	4
BIOB 272	Genetics and Evolution	4
BIOH 280	From Molecules to Mind - Fundamentals of Neuroscience	3
BIOH 380	Cellular and Molecular Neuroscience	3
BIOH 458	Neuroscience Research	4
PSYX 250N	Fund of Biological Psychology	3
Total Hours		25

Course List

Minimum Required Grade: C-

Other Required Courses

Mathematics and Physics

CODE	TITLE	HOURS
Complete all of the following courses:		
M 162	Applied Calculus	4
PHSX 205N & PHSX 206N	College Physics I and College Physics I Laboratory	5
PHSX 207N & PHSX 208N	College Physics II and College Physics II Laboratory	5
Complete one of the following courses:		
STAT 216	Introduction to Statistics	3-4
or PSYX 222	Psychological Statistics	
Total Hours		17-18

Course List

Minimum Required Grade: C-

Chemistry

CODE	TITLE	HOURS
Complete one of the following Chemistry sequences:		9-15
CHMY 121N	Introduction to General Chemistry	
CHMY 123	Introduction to Organic and Biochemistry	
CHMY 124	Introduction to Organic and Biochemistry Lab	
OR		
CHMY 141N & CHMY 142N	College Chemistry I and College Chemistry I Lab	
CHMY 143N & CHMY 144N	College Chemistry II and College Chemistry II Lab	
CHMY 221 & CHMY 222	Organic Chemistry I and Organic Chemistry I Lab	

Course List

Minimum Required Grade: C-

Additional Major Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
BCH 380	Biochemistry	4
PSYX 270	Fund Psychology of Learning	3
PSYX 280	Fund of Memory and Cognition	3
PSYX 356	Human Neuropsychology	3
Total Hours		13

Course List

Minimum Required Grade: C-

CODE	TITLE	HOURS
Complete two of the following courses:		6-7
BIOB 301	Developmental Biology	
BIOH 365	Human Anatomy and Physiology for Health Professions I	
BIOH 441	CNS Diseases	
BMED 610	Neuropharmacology	
BMED 646	Neurotoxicology	
KIN 330	Motor Learning and Control	
PSYX 352	Comparative Psychology	
Total Hours		6-7

Course List

Minimum Required Grade: C-

Intersection Courses

CODE	TITLE	HOURS
Complete one of the following courses		1-9
BIOE 406	Behavior & Evolution	
DANC 345	New Visions Dance	
ECNS 491	Special Topics (Behavioral/Experimental Economics)	
HTH 430	Health and Mind/Body/Spirit	
PSYX 233	Fund of Psychology of Aging	
Total Hours		1-9

Course List

Minimum Required Grade: C-

Human and Family Development Minor < University of Montana

Human and Family Development Minor

Minor - Human and Family Development

College of Humanities & Sciences

Degree Specific Credits: 24

Required Cumulative GPA: 2.5

Catalog Year: 2019-2020

Note: To earn the minor in Human and Family Development, 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 their stated goals and interests. At least 6 credits of electives must be outside of the student's major.

Summary

CODE	TITLE	HOURS
Core Courses		12
Subcategory 1		
Subcategory 2		
Subcategory 3		
Subcategory 4		
Elective Courses		12
Total Hours		24

Course List

Core Courses

Rule: Complete the following subcategories. 12 total credits required.

Subcategory 1

CODE	TITLE	HOURS
Complete one of the following courses:		
PSYX 330	Child Development	3
or PSYX 233	Fund of Psychology of Aging	
Total Hours		3

Course List

Minimum Required Grade: C

Subcategory 2

Note:

- HFD 494 may be taken for 1 credit.
- HFD 498 must be taken for a minimum of 2 credits.
- Education majors may take C&I 295 to fulfill the HFD 498 requirement.
- Social Work majors may use S W 495 hours to fulfill the HFD 498 requirement.

CODE	TITLE	HOURS
Complete all of the following courses:		
HFD 494	Seminar in Human Development	1
HFD 498	Internship	2-4
Total Hours		3-5

Course List

Minimum Required Grade: C

Subcategory 3

CODE	TITLE	HOURS
Complete 1 of the following courses:		3
COMX 311	Family Communication	
SOCI 332	Sociology of the Family	
EDEC 410	Families, Communities, Culture	
Total Hours		3

Course List

Minimum Required Grade: C

Subcategory 4

CODE	TITLE	HOURS
Complete 1 of the following courses:		3
C&I 520	Educational Research	
COMX 460	Research Methods	
PSYX 120	Introduction to Psychological Research Methods	
PSYX 320	Advanced Psychological Research Methods	
S W 400	Social Work Research	
SOCI 318	Sociological Research Methods	
Total Hours		3

Course List

Minimum Required Grade: C

Elective Courses

Rule: 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.

Early Childhood

CODE	TITLE	HOURS
EDEC 408	Early Childhood Principles and Practices	
EDEC 410	Families, Communities, Culture	
EDU 222	Educational Psych Child Dev	
C&I 295	Special Topics	
EDSP 401	Intro Early Intervention	
CSD 210	Speech & Lang Devel	
EDSP 403	Curric/Mthds Early Spec Educ	
EDSP 462	Spec Ed Law, Policy, Practice	
EDU 346	Exceptionalities	
EDU 491	Special Topics/Exp Courses	
HFD 498	Internship	
PSYX 290	Supervised Research	
PSYX 378	Intro to Clinical Psychology	

Course List

Minimum Required Grade: C

School-Age

CODE	TITLE	HOURS
EDU 222	Educational Psych Child Dev	
EDU 346	Exceptionalities	
PHAR 110N	Use & Abuse of Drugs	
PSYX 376	Principles of Cognitive Behavioral Modification	
PSYX 378	Intro to Clinical Psychology	
PSYX 345	Child & Adolescent Psych Disorders	
SOCI 260S	Introduction to Juvenile Delinquency	
S W 300	Hum Behav & Soc Environ	
S W 420	Child Abuse/Child Welfare	
SOCI 332	Sociology of the Family	

Course List

Minimum Required Grade: C

Adolescence

CODE	TITLE	HOURS
EDSP 462	Spec Ed Law, Policy, Practice	
EDU 222	Educational Psych Child Dev	
EDU 346	Exceptionalities	
PHAR 110N	Use & Abuse of Drugs	
PSYX 345	Child & Adolescent Psych Disorders	
PSYX 376	Principles of Cognitive Behavioral Modification	
PSYX 378	Intro to Clinical Psychology	
S W 300	Hum Behav & Soc Environ	
S W 450	Children and Youth at Risk	

Course List

Minimum Required Grade: C

Gerontology

CODE	TITLE	HOURS
AHHS 325	Introduction to Gerontology	
AHHS 327	MGS Meeting	
AHHS 430	Health Aspects of Aging	
AHHS 491	Special Topics	
ANTY 426	Culture, Health and Healing	
PSYX 233	Fund of Psychology of Aging	
S W 455	Social Gerontology	
S W 475	Death, Dying and Grief	

Course List

Minimum Required Grade: C

Family Development

CODE	TITLE	HOURS
COMX 311	Family Communication	
COMX 414	Communication in Personal Relationshps	
COMX 485	Communication and Health	
PSYX 348	Psychology of Family Violence	
S W 423	Addiction Studies	
SOCI 332	Sociology of the Family	

Course List

Minimum Required Grade: C

Sociology Department

Teresa Sobieszczyk, Chair

"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 two concentrations for structuring their course work.

1. 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.
2. Students interested in crime and criminal justice can choose a concentration in Criminology, while students concerned with the causes and consequences of social inequality can select an concentration Inequality and Social Justice.

These concentrations allow students to focus their studies in a particular area of interest while still acquiring a solid foundation in the discipline of Sociology.

Undergraduate

- Sociology B.A.
- Sociology B.A., Criminology Concentration
- Sociology B.A., Inequality and Social Justice Concentration

Undergraduate Minors

- Sociology

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 24 credits (6 upper-division) in addition to the core courses and an upper-division writing course. Any sociology course, including courses from any of the two concentrations, 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 graduate study 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 of Humanities & Sciences

Degree Specific Credits: 39

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: No more than 60 Sociology credits may count toward graduation.

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

		Course List
CODE	**TITLE**	**HOURS**
Core Courses		12
General Sociology Elective		24
Upper-Division Writing Course		3
Total Hours		39

Core Courses

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
SOCI 101S	Introduction to Sociology	3
SOCI 202	Social Statistics	3
SOCI 318	Sociological Research Methods	3
SOCI 455	Classical Sociological Theory	3
Total Hours		12

Minimum Required Grade: C-

General Sociology Electives

		Course List
CODE	**TITLE**	**HOURS**
Complete 24 credits of the following courses:		24
NRSM 424	Community Forestry & Conservtn	
SOCI 130S	Soc of Alternative Religions	
SOCI 211S	Introduction to Criminology	
or SOCI 260S	Introduction to Juvenile Delinquency	
SOCI 212S	Social Issues Southeast Asia	
SOCI 220S	Race, Gender & Class	
SOCI 221	Criminal Justice System	
SOCI 270	Intro Development Sociology	
SOCI 275S	Gender and Society	
SOCI 306	Sociology of Work	
SOCI 312	Criminal Adjudication	
SOCI 325	Social Stratification	
SOCI 332	Sociology of the Family	
SOCI 335	Juvenile Justice System	
SOCI 345	Sociology of Organizations	
SOCI 346	Rural Sociology	
SOCI 350	The Community	
SOCI 355	Population and Society	
SOCI 362	Sociology of Law Enforcement	
SOCI 382	Soc Psych and Social Structure or PSYX 360 Social Psychology	
SOCI 423	Sociology of Corrections	
SOCI 435	Law and Society	
SOCI 438	Seminar in Crime & Deviance	
SOCI 441	Capstone: Inequal and Soc Just	
SOCI 443	Sociology of Poverty	
SOCI 446	Prost & Human Trafficking	
SOCI 470	Environmental Sociology	
SOCI 471	Gender and Global Development	

SOCI 485	Political Sociology	
SOCI 488	Writing for Sociology	
SOCI 498	Internship	
S W 423	Addiction Studies	
Total Hours		24

Minimum Required Grade: C-

Upper-Division Writing Course

Note: A non-sociology upper division writing course from another department may be substituted for this requirement with departmental consent.

		Course List
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		3
SOCI 438	Seminar in Crime & Deviance	
SOCI 441	Capstone: Inequal and Soc Just	
SOCI 488	Writing for Sociology	
Total Hours		3

Minimum Required Grade: C-

Teaching Sociology Track

Notes:

- This teaching track contains different/additional course requirements designed to meet state standards. Those interested in teaching in K-12 schools must complete the teaching track of a major in a teaching content area plus the Teacher Education Program through the Department of Teaching and Learning. Additional teaching areas can be added through completion of the teaching track of a major or minor in that content area.
  - Secondary Education Licensure Program
  - Licensure Degree Requirements
- To complete this teaching track, you need to contact the Teaching and Learning Department. You do not fill out a major/minor form for graduation or the major/minor/concentration section of the major change form. Approvals for this track must come from the Teaching and Learning Department.
- Tracks will not appear on your UM transcript, diploma, university lists, student data system, or university publications. They are used for advising purposes only. You do not fill out a major change for a track.
- Students completing the teaching sociology track must also complete the teaching track in major or minor in a second field of their choice.

Teaching Sociology Track Requirement

Note: The EDU 497 course number is used for multiple courses. Students should register for EDU 497 Methods: 5-12 Social Studies.

Course List		
CODE	**TITLE**	**HOURS**
Complete the following course:		
EDU 497	Teaching and Assessing	4
Total Hours		4

Minimum Required Grade: C-

Secondary Teaching Licensure

Note: For endorsement to teach sociology, a student also must gain admission to the Teacher Education Program and meet all the requirements for secondary teaching licensure. For more information, see the Teaching and Learning Department.

University Of Montana

Sociology B.A. - Criminology

Criminology Concentration

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 concentration 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 concentration provides opportunity for practical experience in juvenile and criminal justice systems through internship placements. The criminology concentration prepares students for employment in public and private criminal justice agencies, as well as graduate study in sociology, criminal justice, and law.

Bachelor of Arts - Sociology; Criminology Concentration

College of Humanities & Sciences

Degree Specific Credits: 39

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: No more than 60 Sociology credits may count toward graduation.

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

		Course List
CODE	**TITLE**	**HOURS**
Core Courses		12
General Sociology Electives (at least two must be upper division)		9
Upper-Division Writing Course		3
Criminology Concentration Requirements		15
Total Hours		39

Core Courses

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
SOCI 101S	Introduction to Sociology	3
SOCI 202	Social Statistics	3
SOCI 318	Sociological Research Methods	3
SOCI 455	Classical Sociological Theory	3
Total Hours		12

Minimum Required Grade: C-

General Sociology Electives

		Course List
CODE	**TITLE**	**HOURS**
Complete three of the following courses, two of which must be 300-level or above:		9
NRSM 424	Community Forestry & Conservtn	
SOCI 130S	Soc of Alternative Religions	
SOCI 212S	Social Issues Southeast Asia	
SOCI 220S	Race, Gender & Class	
SOCI 270	Intro Development Sociology	
SOCI 275S	Gender and Society	
SOCI 306	Sociology of Work	
SOCI 325	Social Stratification	
SOCI 332	Sociology of the Family	
SOCI 345	Sociology of Organizations	
SOCI 346	Rural Sociology	
SOCI 350	The Community	
SOCI 355	Population and Society	
SOCI 382	Soc Psych and Social Structure or PSYX 360 Social Psychology	
SOCI 441	Capstone: Inequal and Soc Just	
SOCI 443	Sociology of Poverty	
SOCI 446	Prost & Human Trafficking	
SOCI 470	Environmental Sociology	
SOCI 471	Gender and Global Development	
SOCI 485	Political Sociology	
SOCI 488	Writing for Sociology	
SOCI 498	Internship	
Total Hours		9

Minimum Required Grade: C-

Upper-Division Writing Course

Note: A non-sociology upper division writing course from another department may be substituted for this requirement with departmental consent.

		Course List
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		3
SOCI 438	Seminar in Crime & Deviance	
SOCI 441	Capstone: Inequal and Soc Just	
SOCI 488	Writing for Sociology	
Total Hours		3

Minimum Required Grade: C-

Criminology Concentration Requirements

Concentration Core

Note: Students should complete SOCI 211S or SOCI 260S, as well as SOCI 221 prior to taking advanced CRIM courses.

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
SOCI 221	Criminal Justice System	3
SOCI 211S	Introduction to Criminology	3
or SOCI 260S	Introduction to Juvenile Delinquency	
Total Hours		6

Minimum Required Grade: C-

Concentration Electives

Course List		
CODE	**TITLE**	**HOURS**
Complete three of the following courses:		9
SOCI 312	Criminal Adjudication	
SOCI 335	Juvenile Justice System	
SOCI 362	Sociology of Law Enforcement	
SOCI 423	Sociology of Corrections	
SOCI 435	Law and Society	
SOCI 438	Seminar in Crime & Deviance	
SOCI 498	Internship	
S W 423	Addiction Studies	
Total Hours		9

Minimum Required Grade: C-

Sociology B.A. - Inequality and Social Justice

Inequality is at the core of most sociological inquires. The concentration 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. A concentration 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 Concentration

College of Humanities & Sciences

Degree Specific Credits: 39

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: No more than 60 Sociology credits may count toward graduation.

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

		Course List
CODE	**TITLE**	**HOURS**
Core Courses		12
General Sociology Electives		9
Upper-Division Writing Course		3
Inequality and Social Justice Concentration Requirements		15
Total Hours		39

Core Courses

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
SOCI 101S	Introduction to Sociology	3
SOCI 202	Social Statistics	3
SOCI 318	Sociological Research Methods	3
SOCI 455	Classical Sociological Theory	3
Total Hours		12

Minimum Required Grade: C-

General Sociology Electives

		Course List
CODE	**TITLE**	**HOURS**
Complete three of the following courses, two of which must be 300-level or above:		9
NRSM 424	Community Forestry & Conservtn	
SOCI 130S	Soc of Alternative Religions	
SOCI 211S	Introduction to Criminology	
or SOCI 260S	Introduction to Juvenile Delinquency	
SOCI 212S	Social Issues Southeast Asia	
SOCI 221	Criminal Justice System	
SOCI 270	Intro Development Sociology	
SOCI 306	Sociology of Work	
SOCI 312	Criminal Adjudication	
SOCI 332	Sociology of the Family	
SOCI 335	Juvenile Justice System	
SOCI 345	Sociology of Organizations	
SOCI 346	Rural Sociology	
SOCI 350	The Community	
SOCI 362	Sociology of Law Enforcement	
SOCI 382	Soc Psych and Social Structure or PSYX 360 Social Psychology	
SOCI 423	Sociology of Corrections	
SOCI 438	Seminar in Crime & Deviance	
SOCI 470	Environmental Sociology	
SOCI 488	Writing for Sociology	
SOCI 498	Internship	
S W 423	Addiction Studies	
Total Hours		9

Minimum Required Grade: C-

Upper-Division Writing Course

Note: A non-sociology upper division writing course from another department may be substituted for this requirement with departmental consent.

		Course List
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		3
SOCI 438	Seminar in Crime & Deviance	
SOCI 441	Capstone: Inequal and Soc Just	
SOCI 488	Writing for Sociology	
Total Hours		3

Minimum Required Grade: C-

Inequality and Social Justice Concentration Requirements

Concentration Core

Note: Students should complete SOCI 220S or SOCI 275S first, and complete at least 2 advanced ISJ electives before taking SOCI 441.

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
SOCI 220S	Race, Gender & Class	3
or SOCI 275S	Gender and Society	
SOCI 441	Capstone: Inequal and Soc Just	3
Total Hours		6

Minimum Required Grade: C-

Concentration Electives

Note: It is recommended that students take SOCI 442 or SOCI 498 concurrent with SOCI 441.

Course List		
CODE	**TITLE**	**HOURS**
Complete three of the following courses:		9
SOCI 325	Social Stratification	
SOCI 355	Population and Society	
SOCI 435	Law and Society	
SOCI 442	ISJ Service Learning	
SOCI 443	Sociology of Poverty	
SOCI 446	Prost & Human Trafficking	
SOCI 471	Gender and Global Development	
SOCI 485	Political Sociology	
SOCI 498	Internship	
Total Hours		9

Minimum Required Grade: C-

University Of Montana

Sociology Minor

Minor - Sociology

College of Humanities & Sciences

Degree Specific Credits: 21

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

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.

Summary

Course List		
CODE	**TITLE**	**HOURS**
Core Courses		9
General Sociology Electives		12
Teaching Sociology Track		
Total Hours		21

Core Courses

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
SOCI 101S	Introduction to Sociology	3
SOCI 318	Sociological Research Methods	3
SOCI 455	Classical Sociological Theory	3
Total Hours		9

Minimum Required Grade: C-

General Sociology Electives

		Course List
CODE	**TITLE**	**HOURS**
Complete four of the following courses:		12
NRSM 424	Community Forestry & Conservtn	
SOCI 130S	Soc of Alternative Religions	

SOCI 211S	Introduction to Criminology	
or SOCI 260S	Introduction to Juvenile Delinquency	
SOCI 221	Criminal Justice System	
SOCI 220S	Race, Gender & Class	
SOCI 270	Intro Development Sociology	
SOCI 275S	Gender and Society	
SOCI 306	Sociology of Work	
SOCI 312	Criminal Adjudication	
SOCI 325	Social Stratification	
SOCI 332	Sociology of the Family	
SOCI 335	Juvenile Justice System	
SOCI 345	Sociology of Organizations	
SOCI 346	Rural Sociology	
SOCI 350	The Community	
SOCI 355	Population and Society	
SOCI 362	Sociology of Law Enforcement	
SOCI 382	Soc Psych and Social Structure	
SOCI 423	Sociology of Corrections	
SOCI 435	Law and Society	
SOCI 438	Seminar in Crime & Deviance	
SOCI 441	Capstone: Inequal and Soc Just	
SOCI 442	ISJ Service Learning	
SOCI 443	Sociology of Poverty	
SOCI 446	Prost & Human Trafficking	
SOCI 470	Environmental Sociology	
SOCI 471	Gender and Global Development	
SOCI 485	Political Sociology	
SOCI 488	Writing for Sociology	
SOCI 498	Internship (only 3 credits of internship can count towards the 12 credit limit)	
Total Hours		12

Minimum Required Grade: C-

Teaching Sociology Track

Notes:

- This teaching track contains different/additional course requirements designed to meet state standards. Those interested in teaching in K-12 schools must complete the teaching track of a major in a teaching content area plus the Teacher Education Program through the Department of Teaching and Learning. Additional teaching areas can be added through completion of the teaching track of a major or minor in that content area.
    - Secondary Education Licensure Program
    - Licensure Degree Requirements
- To complete this teaching track, you need to contact the Teaching and Learning Department. You do not fill out a major/minor form for graduation or the major/minor/concentration section of the major change form. Approvals for this track must come from the Teaching and Learning Department.
- Tracks will not appear on your UM transcript, diploma, university lists, student data system, or university publications. They are used for advising purposes only. You do not fill out a major change for a track.
- Individuals completing the teaching track of this minor must also complete the teaching track of a major in another teaching content area.

Teaching Sociology Track Requirement

Note: The EDU 497 course number is used for multiple courses. Students should register for EDU 497 Methods: 5-12 Social Studies.

Course List		
CODE	**TITLE**	**HOURS**
Complete the following course:		
EDU 497	Teaching and Assessing	4
Total Hours		4

Minimum Required Grade: C-

Secondary Teaching Licensure

Note: For endorsement to teach sociology, a student also must gain admission to the Teacher Education Program and meet all the requirements for secondary teaching licensure. For more information, see the Teaching and Learning Department.

South and South-East Asian Studies < University of Montana

South and South-East Asian Studies

- Overview
- Programs

Ruth Vanita and G.G. Weix, Directors

The South and South-East Asian Studies program offers undergraduates at the University of Montana-Missoula an 18-credit autonomous and interdisciplinary minor to students of all majors, and also offers all students opportunity to take classes on 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 primary focus is on India and Indonesia.

This is an interdisciplinary program with faculty input from several departments, including English, Anthropology, Sociology and Political Science.

Students may choose to minor in South and South-East Asian Studies with a major in any discipline. Students interested in the minor should contact Professor Ruth Vanita and are encouraged to plan their course sequence at least one semester in advance.

Undergraduate Minors

- South and South-East Asian Studies Minor

South and South-East Asian Studies Minor

Minor - South & South-East Asian Studies

College of Humanities & Sciences

Degree Specific Credits: 18

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Summary

Course List		
CODE	**TITLE**	**HOURS**
Lower-Division Requirements		9
Introductory Course		
Lower-Division Electives		
Upper-Division Requirements		9
Total Hours		18

Lower-Division Requirements

Rule: Complete the following subcategories of courses. Any substitutions must be approved by the SSEA faculty director.

Introductory Course

Course List		
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		3
ANTY 102H	Intro to South & S. East Asia	
GH 161H	Asian Humanities	
SSEA 202X	Introduction to India	
Total Hours		3

Minimum Required Grade: C-

Lower-Division Electives

Course List		
CODE	**TITLE**	**HOURS**
Complete two of the following courses:		6
ANTY 102H	Intro to South & S. East Asia	
GH 191	Special Topics (6 credits of Hindi language (any level) may count towards the total credits for the minor)	
GH 161H	Asian Humanities	
GH 291	Special Topics	
RLST 232H	Buddhism	
SSEA 234X	Hindu Religious Traditions	
Total Hours		6

Minimum Required Grade: C-

Upper-Division Requirements

Note: Any substitutions must be approved by the SSEA director.

		Course List
CODE	**TITLE**	**HOURS**
Complete 9 credits from the following courses:		9
ANTY 427	Anthropology of Gender	
ANTY 440	Cont. Issues of SSEA	
GH 316E	Talking to God: Bhagavad Gita	
GH 326	Stories East and West	
GH 328L	Gender Sexuality India	
GH 415	Same Sex Unions Literature	
LIT 344	Asian American Literature	
SSEA 330X	Peoples and Cultures of World	
SSEA 342	Topics Comparative Lit & Rel	
SSEA 368	Contemporary Buddhism in SSEA	
RLST 366	Tibetan Civilization	
Total Hours		9

Minimum Required Grade: C-

Women's, Gender and Sexuality Studies < University of Montana

Women's, Gender and Sexuality Studies

- Overview
- Programs

Elizabeth Hubble, Director

Women's, Gender and Sexuality 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, Gender and Sexuality Studies encourages students to think critically and to envision justice for all peoples.

The Women's, Gender and Sexuality Studies program is administered by the director, with assistance from the program coordinator, in consultation with the Women's, Gender and Sexuality Studies Executive Committee, an interdisciplinary group of faculty and professional associates with teaching, research, and scholarly interests in women, gender and sexuality.

Students may include Women's, Gender and Sexuality Studies in their studies by earning a B.A. or by completing a 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, Gender and Sexuality 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, Gender and Sexuality Studies director, who will explain major or minor requirements and supervise their program.

Undergraduate

- Women's, Gender & Sexuality Studies B.A.

Undergraduate Minors

- Women's, Gender & Sexuality Studies

Women's, Gender and Sexuality Studies B.A. < University of Montana

Women's, Gender and Sexuality Studies B.A.

- Overview
- Requirements

Professor Elizabeth Hubble, Director of the Women's, Gender and Sexuality Studies:

Students who choose the Women's, Gender and Sexuality Studies (WGSS) B.A. must register with the WGSS advisor, who will supervise their program.

Bachelor of Arts - Women's, Gender, & Sexuality Studies

College of Humanities & Sciences

Degree Specific Credits: 32

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

CODE	TITLE	HOURS
Required Courses		14
Electives		18
Humanities Electives		
Social Science Electives		
Total Hours		32

Course List

Required Courses

Note: Students must arrange a WGSS 398 internship with the WGSS Director prior to beginning their senior year. A list of available internships is available in the WGSS Office.

CODE	TITLE	HOURS
Complete all of the following courses:		
WGSS 163L	Hist/Lit Persp Women	3
WGSS 263S	Social and Political Perspectives on Gender and Sexuality	3
WGSS 363	Feminist Theory and Methods	3
WGSS 398	Coop Education/Internship	3
WGSS 463	WGS Capstone	2
Total Hours		14

Course List

Minimum Required Grade: C-

Electives

Rule: Of the 18 elective credits, 11 credits must be upper-division.

Note: Interdisciplinary courses and courses that appear on the WGSS curriculum list that do not fall within the Humanities and Social Science lists may be substituted with the approval of co-directors. WGSS Internship/Independent Study (392, 398, 492) courses may count for either the Humanities Core or the Social Science Core, depending on the topic. The following is a list of regularly offered courses that would fulfill the WGSS elective credits. Unless indicated, all courses are 3 credits. These courses are offered, in general, every one, two, or three years. Students are advised to check with the WGSS Office for individual semester course listings.

Humanities Electives

CODE	TITLE	HOURS
Complete 9 credits from the following courses:		9
AAST 141H	Black: From Africa to Hip-Hop	
CLAS 320	Women in Antiquity	
COMX 380	Gender and Communication	
COMX 447	Rhetorical Contruction of Women	
COMX 449	Rhetoric of Women's Activism	
GH 151L	Introduction to Western Humanities Antiquity	
GH 152L	Introduction to the Humanities Medieval to Modern	
GH 327L	Gender & Sexuality in Eng Fict	
GH 329	Fathers and Daughters in Western Literary Traditions	
HSTA 342H	Afr Amer Hist to 1865	
HSTA 343H	Afr Amer Hist Since 1865	
HSTA 347	Voodoo, Muslim, Church: Black Religion	
HSTA 361	The American South	
HSTA 370H	Wmn Amer Colonial to Civil War	
HSTA 371H	Wmn Amer Civil War to Present	
HSTA 377	Alcohol in American History	
HSTA 385	Families & Children in America	
HSTA 415	The Black Radical Tradition	
HSTA 417	Prayer & Civil Rights	
HSTA 471	Writing Women's Lives	
LIT 304	U.S. Writers of Color	
LIT 378L	Gay and Lesbian Studies	
NASX 235X	Oral/Written Trads Native Amer	
NASX 304E	Native American Beliefs/Philos	
RLST 370	Mysticism	
WGSS 250	Media Representations of Women, Men, and Sexuality	
Total Hours		9

Course List

Minimum Required Grade: C-

Social Science Electives

CODE	TITLE	HOURS
Complete 9 credits from the following courses:		9
ANTY 330X	Peoples and Cultures of World	
ANTY 427	Anthropology of Gender	
COUN 242S	Intimate Relationships	
COUN 485	Counseling Theories	
ENST 489S	Environmental Justice Issues & Solutions	
NASX 231X	Indig World View Perspectives	
NASX 303E	Ecological Perspectives in Native American Traditions	
NASX 306X	Contemp Global Iss Indg People	
PSYX 348	Psychology of Family Violence	
PSYX 362	Multicultural Psychology	
S W 323	Women & Soc Action Amer	
SOCI 220S	Race, Gender & Class	
SOCI 275S	Gender and Society	
SOCI 325	Social Stratification	
SOCI 332	Sociology of the Family	
SOCI 346	Rural Sociology	
SOCI 355	Population and Society	
SOCI 441	Capstone: Inequal and Soc Just	
SOCI 443	Sociology of Poverty	
SOCI 446	Prost & Human Trafficking	
SOCI 471	Gender and Global Development	
Total Hours		9

Course List

Minimum Required Grade: C-

Women's, Gender and Sexuality Studies Minor < University of Montana

Women's, Gender and Sexuality Studies Minor

Minor - Women's, Gender, & Sexuality Studies

College of Humanities & Sciences

Degree Specific Credits: 20

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Summary

CODE	TITLE	HOURS
Lower-Division Core Requirements		3
Upper-Division Core Requirements		5
Approved Elective Courses		12
Total Hours		20

Course List

Lower-Division Core Requirements

CODE	TITLE	HOURS
Complete one of the following courses:		
WGSS 163L	Hist/Lit Persp Women	3
or WGSS 263S	Social and Political Perspectives on Gender and Sexuality	
Total Hours		3

Course List

Minimum Required Grade: C-

Upper-Division Core Requirements

CODE	TITLE	HOURS
Complete all of the following courses:		
WGSS 363	Feminist Theory and Methods	3
WGSS 463	WGS Capstone	2
Total Hours		5

Course List

Minimum Required Grade: C-

Approved Elective Courses

Note: WGSS 392, WGSS 398 and WGSS 492 (Internship/Independent Study) may be applied toward these credits

CODE	TITLE	HOURS
Complete 12 credits from the following courses, at least one of which must be upper-division (300-400 level):		12
Any WGSS course		
AAST 141H	Black: From Africa to Hip-Hop	
ANTY 330X	Peoples and Cultures of World	
ANTY 427	Anthropology of Gender	
CLAS 320	Women in Antiquity	
COMX 380	Gender and Communication	
COMX 447	Rhetorical Contruction of Women	
COMX 449	Rhetoric of Women's Activism	
COUN 242S	Intimate Relationships	
COUN 485	Counseling Theories	
ENST 489S	Environmental Justice Issues & Solutions	
GRMN 317L	Introduction to Multicultural Literature in Contemporary Germany	
GH 327L	Gender & Sexuality in Eng Fict	
HSTA 342H	Afr Amer Hist to 1865	
HSTA 343H	Afr Amer Hist Since 1865	
HSTA 347	Voodoo, Muslim, Church: Black Religion	
HSTA 361	The American South	
HSTA 370H	Wmn Amer Colonial to Civil War	
HSTA 371H	Wmn Amer Civil War to Present	
HSTA 377	Alcohol in American History	
HSTA 385	Families & Children in America	
HSTA 415	The Black Radical Tradition	
HSTA 417	Prayer & Civil Rights	
HSTA 471	Writing Women's Lives	
LIT 378L	Gay and Lesbian Studies	
NASX 231X	Indig World View Perspectives	
NASX 235X	Oral/Written Trads Native Amer	
NASX 303E	Ecological Perspectives in Native American Traditions	
NASX 304E	Native American Beliefs/Philos	
NASX 306X	Contemp Global Iss Indg People	

CODE	TITLE	HOURS
PSYX 348	Psychology of Family Violence	
RLST 370	Mysticism	
S W 323	Women & Soc Action Amer	
SOCI 220S	Race, Gender & Class	
SOCI 275S	Gender and Society	
SOCI 325	Social Stratification	
SOCI 332	Sociology of the Family	
SOCI 346	Rural Sociology	
SOCI 355	Population and Society	
SOCI 441	Capstone: Inequal and Soc Just	
SOCI 443	Sociology of Poverty	
SOCI 446	Prost & Human Trafficking	
SOCI 471	Gender and Global Development	
Total Hours		12

Course List

Minimum Required Grade: C-

World Languages and Cultures Department

Brian Dowdle and Mathew Semanoff, Chairs

Instruction is offered in the following languages and literatures:

- Arabic
- Chinese
- French
- German
- Classical Greek
- Italian
- Japanese
- Latin
- Russian
- Spanish

In addition, instruction is offered in linguistics and 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 World Languages and Cultures offers undergraduate majors in:

- Classics (Greek and Latin), with concentrations in Classical Languages (Latin and Greek), Classical Civilization, and Latin
- French
- German
- Japanese
- Russian
- Spanish

There are also undergraduate minors in:

- Arabic
- Chinese

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 (201or 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 World Languages and Cultures offers programs of accredited study in Austria, Chile, China, France, Germany, Italy, Japan, 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 World Languages and Cultures. The department also sponsors work/study internships abroad for students in Japanese.

Undergraduate

- Classics B.A., Classical Civilization Concentration
- Classics B.A., Classical Languages Concentration
- Classics B.A., Latin Concentration
- French B.A.
- German B.A.
- Japanese B.A.
- Russian B.A.
- Spanish B.A.

Undergraduate Minors

- Arabic Studies
- Chinese
- Classical Civilization
- European Studies
- French
- German
- Greek
- Japanese
- Latin American Studies
- Latin
- Russian
- Russian Studies
- Spanish

Certificate

- World Competencies

Arabic Studies Minor < University of Montana

Arabic Studies Minor

Minor - Arabic Studies

College of Humanities & Sciences

Degree Specific Credits: 22

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: At least 6 credits must be of upper division courses. A minimum grade of C is required in all the courses taken to fulfill the minor.

Summary

CODE	TITLE	HOURS
Lower-Division Core Courses		16
Upper-Division Core Courses		3
Electives		3
Total Hours		22

Course List

Lower-Division Core Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
ARAB 101	Elementary Modern Standard Arabic I	4
ARAB 102	Elementary Modern Standard Arabic II	4
ARAB 201	Intermediate Modern Standard Arabic I	4
ARAB 202	Intermediate Modern Standard Arabic II	4
Total Hours		16

Course List

Minimum Required Grade: C

Upper-Division Core Courses

CODE	TITLE	HOURS
Complete the following course:		
ARAB 305	The Arab World	3
Total Hours		3

Course List

Minimum Required Grade: C

Electives

Note: 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 institution) may be counted as an elective if at least 75% of the content is related to the Arab world. Below is a list of suggested courses.

CODE	TITLE	HOURS
Complete one of the following courses:		3
ARAB 392	Independent Study	
HSTR 386	Nationalism Modern Middle East	
PSCI 320	Exp Offering: Comp Politics (Politics of the Middle East)	
PSCI 334	International Security	
Total Hours		3

Course List

Minimum Required Grade: C

Chinese Minor < University of Montana

Chinese Minor

Minor - Chinese

College of Humanities & Sciences

Degree Specific Credits: 29

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Summary

CODE	TITLE	HOURS
Lower-Division Core Courses		20
Upper-Division Electives		9
Total Hours		29

Course List

Lower-Division Core Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
CHIN 101	Elementary Chinese I	5
CHIN 102	Elementary Chinese II	5
CHIN 201	Intermediate Chinese I	5
CHIN 202	Intermediate Chinese II	5
Total Hours		20

Course List

Minimum Required Grade: C-

Upper-Division Electives

Note: With prior approval, 3 of these credits may be in China focused courses offered by other departments.

CODE	TITLE	HOURS
Complete 9 credits from the following courses:		9
CHIN 313L	Chinese Poetry in Translation	
CHIN 314L	Traditiona Chinese Literature	
CHIN 380	Chinese Folktales	
CHIN 388	Readings in Classical Chinese	
Total Hours		9

Course List

Minimum Required Grade: C-

Classical Civilization Minor < University of Montana

Classical Civilization Minor

Minor - Classical Civilization

College of Humanities & Sciences

Degree Specific Credits: 24

Required Cumulative GPA: 2.5

Catalog Year: 2019-2020

Summary

CODE	TITLE	HOURS
Lower-Division Core		6
Language Requirement		6
Greek		
Latin		
Electives		12
Electives I		
Electives II		
Total Hours		24

Course List

Lower-Division Core

CODE	TITLE	HOURS
Complete all of the following courses:		
CLAS 155L	Survey of Greek and Roman Lit	3
CLAS 160L	Classical Mythology	3
Total Hours		6

Course List

Minimum Required Grade: C-

Language Requirement

Rule: Must complete one of the following language sequences.

Option One: Greek

CODE	TITLE	HOURS
Greek		6
GRK 101	Elementary Greek I	
GRK 102	Elementary Greek II	
Total Hours		6

Course List

Minimum Required Grade: C-

Option Two: Latin

CODE	TITLE	HOURS
Latin		6
LATN 101	Elementary Latin I	
LATN 102	Elementary Latin II	
Total Hours		6

Course List

Minimum Required Grade: C-

Electives

Rule: Complete the following subcategories. 12 total credits required.

Electives I

CODE	TITLE	HOURS
Complete three of the following courses:		9
ARTH 407	Roman and Early Christian Art	
CLAS 251L	The Epic	
CLAS 252L	Greek Drama: Politics on Stage	
CLAS 320	Women in Antiquity	
CLAS 360H	Ancient Greek Civ and Culture	
CLAS 365E	The Roots of Western Ethics	
GRK 201	Intermediate Greek I	
GRK 202	Intermediate Greek II	
GRK 300	Major Greek Writers	
LATN 201	Intermediate Latin I	
LATN 202	Intermediate Latin II	
LATN 311	Major Latin Authors	
PHL 363H	Ancient Greek and Roman Philosophy	
Total Hours		9

Course List

Minimum Required Grade: C-

Electives II

CODE	TITLE	HOURS
Complete one of the following courses:		3
HSTR 301X	Ancient Greek Social History	
HSTR 302H	Ancient Greece	
HSTR 304H	Ancient Rome	
Total Hours		3

Course List

Minimum Required Grade: C-

Classics B.A. - Classical Civilization < University of Montana

Classics B.A. - Classical Civilization

Bachelor of Arts - Classics; Classical Civilization Concentration

College of Humanities & Sciences

Degree Specific Credits: 39

Required Cumulative GPA: 2.5

Catalog Year: 2019-2020

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

CODE	TITLE	HOURS
Classics Core Courses		24
Literature and History		
Languages: Latin or Greek		
Classics Electives		15
Total Hours		39

Course List

Classics Core Courses

Literature and History

CODE	TITLE	HOURS
Complete all of the following courses:		
CLAS 160L	Classical Mythology	3
CLAS 251L	The Epic	3
or CLAS 252L	Greek Drama: Politics on Stage	
CLAS 399	Capstone	3
HSTR 302H	Ancient Greece	3
or HSTR 304H	Ancient Rome	
Total Hours		12

Course List

Minimum Required Grade: C-

Languages

Rule: Complete 12 credits in one of the following options:

Option One: Latin

CODE	TITLE	HOURS
Latin		12
LATN 101	Elementary Latin I	
LATN 102	Elementary Latin II	
LATN 201	Intermediate Latin I	
LATN 202	Intermediate Latin II	
Total Hours		12

Course List

Minimum Required Grade: C-

Option Two: Greek

CODE	TITLE	HOURS
Greek		12
GRK 101	Elementary Greek I	
GRK 102	Elementary Greek II	
GRK 201	Intermediate Greek I	
GRK 202	Intermediate Greek II	
Total Hours		12

Course List

Minimum Required Grade: C-

Classics Electives

Note: Classes taken in fulfillment of the Classics Core requirements cannot be counted towards electives.

CODE	TITLE	HOURS
Complete 15 credits of the following courses:		15
ARTH 407	Roman and Early Christian Art	
CLAS 320	Women in Antiquity	
CLAS 360H	Ancient Greek Civ and Culture	
CLAS 365E	The Roots of Western Ethics	
GRK 101	Elementary Greek I	
GRK 102	Elementary Greek II	
GRK 201	Intermediate Greek I	
GRK 202	Intermediate Greek II	
GRK 300	Major Greek Writers	
HSTR 301X	Ancient Greek Social History	
HSTR 302H	Ancient Greece	
HSTR 304H	Ancient Rome	
LATN 101	Elementary Latin I	
LATN 102	Elementary Latin II	
LATN 201	Intermediate Latin I	
LATN 202	Intermediate Latin II	
LATN 311	Major Latin Authors	
PHL 363H	Ancient Greek and Roman Philosophy	
PHL 465	Plato	
PHL 466	Aristotle	
Total Hours		15

Course List

Minimum Required Grade: C-

Classics B.A. - Classical Languages < University of Montana

Classics B.A. - Classical Languages

Bachelor of Arts - Classics; Classical Languages Concentration

College of Humanities & Sciences

Degree Specific Credits: 39

Required Cumulative GPA: 2.5

Catalog Year: 2019-2020

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

CODE	TITLE	HOURS
Classics Core Courses		24
Literature and History		
Languages: Latin or Greek		
Classical Language Electives		15
Total Hours		39

Course List

Classics Core Courses

Literature and History

CODE	TITLE	HOURS
Complete all of the following courses:		
CLAS 160L	Classical Mythology	3
CLAS 251L	The Epic	3
or CLAS 252L	Greek Drama: Politics on Stage	
CLAS 399	Capstone	3
HSTR 302H	Ancient Greece	3
or HSTR 304H	Ancient Rome	
Total Hours		12

Course List

Minimum Required Grade: C-

Languages

Rule: Complete 12 credits in one of the following options.

Option One: Latin

CODE	TITLE	HOURS
Latin		12
LATN 101	Elementary Latin I	
LATN 102	Elementary Latin II	
LATN 201	Intermediate Latin I	
LATN 202	Intermediate Latin II	
Total Hours		12

Course List

Minimum Required Grade: C-

Option Two: Greek

CODE	TITLE	HOURS
Greek		12
GRK 101	Elementary Greek I	
GRK 102	Elementary Greek II	
GRK 201	Intermediate Greek I	
GRK 202	Intermediate Greek II	
Total Hours		12

Course List

Minimum Required Grade: C-

Classical Language Electives

Rule: Complete an additional 15 credits of Greek and Latin Language. A minimum of 9 credits in each language is required. Classes taken in fulfillment of the Classics Core cannot be counted towards Classical Language Electives.

CODE	TITLE	HOURS
Complete 15 credits of the following courses:		15
GRK 101	Elementary Greek I	
GRK 102	Elementary Greek II	
GRK 201	Intermediate Greek I	
GRK 202	Intermediate Greek II	
GRK 300	Major Greek Writers	
LATN 101	Elementary Latin I	
LATN 102	Elementary Latin II	
LATN 201	Intermediate Latin I	
LATN 202	Intermediate Latin II	
LATN 311	Major Latin Authors	
Total Hours		15

Course List

Minimum Required Grade: C-

Classics B.A. - Latin Concentration < University of Montana

Classics B.A. - Latin Concentration

Bachelor of Arts - Classics; Latin Concentration

College of Humanities & Sciences

Degree Specific Credits: 39

Required Cumulative GPA: 2.5

Catalog Year: 2019-2020

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

CODE	TITLE	HOURS
Classics Core Courses		24
Literature and History		
Languages		
Advanced Latin Language		9
Latin Major Electives		6
Teaching Latin Track		
Total Hours		39

Course List

Classics Core Courses

Literature and History

CODE	TITLE	HOURS
Complete all of the following courses:		
CLAS 160L	Classical Mythology	3
CLAS 251L	The Epic	3
or CLAS 252L	Greek Drama: Politics on Stage	
CLAS 399	Capstone	3
HSTR 304H	Ancient Rome	3
Total Hours		12

Course List

Minimum Required Grade: C-

Languages

CODE	TITLE	HOURS
Complete all of the following courses:		
LATN 101	Elementary Latin I	3
LATN 102	Elementary Latin II	3
LATN 201	Intermediate Latin I	3
LATN 202	Intermediate Latin II	3
Total Hours		12

Course List

Minimum Required Grade: C-

Advanced Latin Language

CODE	TITLE	HOURS
Complete 9 credits of the following courses:		9
LATN 311	Major Latin Authors	
LATN 391	Special Topics	
LATN 392	Independent Study	
LATN 492	Independent Study	
Total Hours		9

Course List

Minimum Required Grade: C-

Latin Major Electives

CODE	TITLE	HOURS
Complete 6 credits from the following courses:		6
ARTH 407	Roman and Early Christian Art	
CLAS 320	Women in Antiquity	
CLAS 360H	Ancient Greek Civ and Culture	
CLAS 365E	The Roots of Western Ethics	
HSTR 301X	Ancient Greek Social History	
HSTR 302H	Ancient Greece	
MCLG 410	Methods Teaching Foreign Language	
PHL 363H	Ancient Greek and Roman Philosophy	
PHL 465	Plato	
PHL 466	Aristotle	
Total Hours		6

Course List

Minimum Required Grade: C-

Teaching Latin Track

Notes:

- This teaching track contains different/additional course requirements designed to meet state standards. Those interested in teaching in K-12 schools must complete the teaching track of a major in a teaching content area plus the Teacher Education Program through the Department of Teaching and Learning. Additional teaching areas can be added through completion of the teaching track of a major or minor in that content area.
  - Secondary Education Licensure Program
  - Licensure Degree Requirements
- To complete this teaching track, you need to contact the Teaching and Learning Department. You do not fill out a major/minor form for graduation or the major/minor/concentration section of the major change form. Approvals for this track must come from the Teaching and Learning Department.
- Tracks will not appear on your UM transcript, diploma, university lists, student data system, or university publications. They are used for advising purposes only. You do not fill out a major change for a track.

Teaching Latin Track Requirements

CODE	TITLE	HOURS
Complete all of the following courses:		
ARTH 407	Roman and Early Christian Art	3
MCLG 410	Methods Teaching Foreign Language	3
Total Hours		6

Course List

Minimum Required Grade: C-

Note: For endorsement to teach Latin, a student also must gain admission to the Teacher Education Program and meet all the requirements for secondary teaching licensure. For more information, see the Teaching and Learning Department.

European Studies Minor < University of Montana

European Studies Minor

Minor - European Studies

College of Humanities & Sciences

Degree Specific Credits: 33-37

Required Cumulative GPA: 2.00

Catalog Year: 2019-2020

Summary

CODE	TITLE	HOURS
Core Courses		3
Foreign Language		12-16
Upper-Division Electives		18
Total Hours		33-37

Course List

Core Course

CODE	TITLE	HOURS
Complete the following course:		
MCLG 110	Introduction to European Studies	3
Total Hours		3

Course List

Minimum Required Grade: C-

Foreign Language

CODE	TITLE	HOURS
Complete one of the following language sequences:		12-16
Ancient Greek		
GRK 101	Elementary Greek I	
GRK 102	Elementary Greek II	
GRK 201	Intermediate Greek I	
GRK 202	Intermediate Greek II	
French		
FRCH 101	Elementary French I	

CODE	TITLE	HOURS
FRCH 102	Elementary French II	
FRCH 201	Intermediate French I	
FRCH 202	Intermediate French II	
German		
GRMN 101	Elementary German I	
GRMN 102	Elementary German II	
GRMN 201	Intermediate German I	
GRMN 202	Intermediate German II	
Latin		
LATN 101	Elementary Latin I	
LATN 102	Elementary Latin II	
LATN 201	Intermediate Latin I	
LATN 202	Intermediate Latin II	
Russian		
RUSS 101	Elementary Russian I	
RUSS 102	Elementary Russian II	
RUSS 201	Intermediate Russian I	
RUSS 202	Intermediate Russian II	
Spanish		
SPNS 101	Elementary Spanish I	
SPNS 102	Elementary Spanish II	
SPNS 201	Intermediate Spanish I	
SPNS 202	Intermediate Spanish II	
Total Hours		12-16

Course List

Minimum Required Grade: C-

Upper-Division Electives

Note: Two lower-division courses in a second European language may be substituted for two of the six required upper-division courses, subject to advisor approval.

CODE	TITLE	HOURS
Complete six of the following courses (at least three courses must come from two different disciplines offered outside of the student's primary major):		18
English		

CODE	TITLE	HOURS
FILM 320	Shakespeare and Film	
LIT 327	Shakespeare	
LIT 350L	Chaucer	
LIT 351	Donne & His Followers	
LIT 353L	Milton	
LIT 355	British Romanticism	
Modern & Classical Languages & Literatures		
CLAS 320	Women in Antiquity	
CLAS 360H	Ancient Greek Civ and Culture	
CLAS 365E	The Roots of Western Ethics	
FRCH 310	Fr. Lit. Cult. Mid. Age Renass	
FRCH 311	Fr. Lit. Cult. 17th 18th Cent.	
FRCH 312	Fr. Lit. Cult. Long 19th Cent.	
FRCH 313	Literature and Culture III: French and Francophone Literatures and Cultures of the 20th Century	
FRCH 338	The French Cinema	
FRCH 350	French Civ & Culture	
FRCH 420	Studies in French Prose	
FRCH 430	Studies in French Drama	
FRCH 440	Studies in French Poetry	
GRMN 317L	Introduction to Multicultural Literature in Contemporary Germany	
GRMN 322L	Survey of German Cinema	
GRMN 340L	Nature and the Environment in German Literature and Film	
GRMN 351H	German Culture: Beginnings to Romanticism	
GRMN 352H	Germ Culture: Romanticism to the Present	
GRMN 431	German Literature 1760-1832	
GRMN 441	19th Century German Literature	
GRMN 451	20th Century German Literature to 1945	
GRMN 452	20th Century German Literature Since 1945	
GRMN 453	German Literature Since Unification	
RUSS 306L	Evil and the Supernatural in Russian Literature	
RUSS 307L	Beauty, Power and Pride in Russian Literature	
RUSS 411	19th-Century Russian Authors	

CODE	TITLE	HOURS
RUSS 412	20th-Century Russian Authors	
RUSS 424	Russian Short Story	
RUSS 440	Russian Poetry	
RUSS 494	Seminar in Russian Studies	
SPNS 326	Contemporary Spanish Lit	
SPNS 465	Spanish Lit:Renaiss/Goldn Age	
SPNS 466	Spanish Lit:Modern & Contemp	
European History		
HSTR 320	European Social and Intellectual History: 1450-1789	
HSTR 323	European Social and Intellectual History: The 19th Century	
HSTR 325	European Social and Intellectual History: The 20th Century	
HSTR 326	Contemporary Europe	
HSTR 348	Britain 1485-1688	
HSTR 349	Britain from Rev - Reform 1688	
HSTR 350	Modern Britain	
HSTR 352	France Revol 1789-1848	
HSTR 354	Italy: 1300-1800	
HSTR 355	Italy: 1800-Present	
HSTR 357	Russia to 1881	
HSTR 358	Russia Since 1881	
HSTR 363	Eastern Europe	
Global Humanities		
GH 327L	Gender & Sexuality in Eng Fict	
GH 329	Fathers and Daughters in Western Literary Traditions	
Religious Studies		
RLST 335	Western Religious Thought I	
RLST 336	Western Religious Thought II	
Music		
MUSI 301H	Music History I	
MUSI 302H	Music History II	
Art History		
ARTH 407	Roman and Early Christian Art	

CODE	TITLE	HOURS
ARTH 425	Art of the Renaissance	
ARTH 440	20th Century Art	
ARTH 465	Spanish Art	
Total Hours		18

Course List

Minimum Required Grade: C-

French B.A. < University of Montana

French B.A.

Bachelor of Arts - French

College of Humanities & Sciences

Degree Specific Credits: 30

Required Cumulative GPA: 2.5

Catalog Year: 2019-2020

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. FRCH 101 through FRCH 202, or equivalent, are a prerequisite for this major. A minimum of twelve upper-division credits for the major must be taken from UM faculty on the UM campus.

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

CODE	TITLE	HOURS
Upper-Division Core		9
Survey Course Electives		9
Degree Electives		6
Literature and/or Culture Courses		6
Teaching French Track		
Total Hours		30

Course List

Upper-Division Core

CODE	TITLE	HOURS
Complete all of the following courses:		
FRCH 301	Adv Grammar/Oral Writ Exprsn	3
FRCH 350	French Civ & Culture	3
FRCH 421	Adv Stylistics & Oral Arg	3
Total Hours		9

Course List

Minimum Required Grade: C-

Survey Course Electives

CODE	TITLE	HOURS
Complete three of the following courses:		9
FRCH 310	Fr. Lit. Cult. Mid. Age Renass	
FRCH 311	Fr. Lit. Cult. 17th 18th Cent.	
FRCH 312	Fr. Lit. Cult. Long 19th Cent.	
FRCH 313	Literature and Culture III: French and Francophone Literatures and Cultures of the 20th Century	
Total Hours		9

Course List

Minimum Required Grade: C-

Degree Electives

CODE	TITLE	HOURS
Complete 6 credits from the following courses:		6
FRCH 300	Intro to Literature in French	
FRCH 338	The French Cinema	
FRCH 339	Surv African Cinema	
FRCH 391	Special Topics	
FRCH 392	Independent Study	
Total Hours		6

Course List

Minimum Required Grade: C-

Literature and/or Culture Courses

CODE	TITLE	HOURS
Complete 6 credits from the following courses:		6
FRCH 420	Studies in French Prose	
FRCH 430	Studies in French Drama	
FRCH 440	Studies in French Poetry	
FRCH 491	Special Topics	
FRCH 492	Independent Study	
FRCH 494	Seminar/Workshop	
Total Hours		6

Course List

Minimum Required Grade: C-

Teaching French Track

Notes:

- This teaching track contains different/additional course requirements designed to meet state standards. Those interested in teaching in K-12 schools must complete the teaching track of a major in a teaching content area plus the Teacher Education Program through the Department of Teaching and Learning. Additional teaching areas can be added through completion of the teaching track of a major or minor in that content area.
  - Secondary Education Licensure Program
  - Licensure Degree Requirements
- To complete this teaching track, you need to contact the Teaching and Learning Department. You do not fill out a major/minor form for graduation or the major/minor/concentration section of the major change form. Approvals for this track must come from the Teaching and Learning Department.
- Tracks will not appear on your UM transcript, diploma, university lists, student data system, or university publications. They are used for advising purposes only. You do not fill out a major change for a track.
- 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 in another field in more demand in high schools.
- Study in a French speaking country, provided either through the university's Study Abroad Program or an experience considered to be equivalent, also is required.

Teaching French Track Requirements

CODE	TITLE	HOURS
Complete all of the following courses:		
LING 270S	Intro to Linguistics	3
MCLG 410	Methods Teaching Foreign Language	3
Total Hours		6

Course List

Minimum Required Grade: C-

Secondary Teaching Licensure

Note: For endorsement to teach French, a student also must gain admission to the Teacher Education Program and meet all the requirements for secondary teaching licensure. For more information, see the Teaching and Learning Department.

French Minor < University of Montana

French Minor

Minor - French

College of Humanities & Sciences

Degree Specific Credits: 15

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: FRCH 101-FRCH 202, or equivalent, are prerequisites to the minor in French. A minimum of six upper-division credits for the minor must be taken from UM faculty on the UM campus.

Summary

CODE	TITLE	HOURS
Upper-Division Core		6
Electives		9
Teaching French Track		
Total Hours		15

Course List

Upper-Division Core

CODE	TITLE	HOURS
Complete all of the following courses:		
FRCH 301	Adv Grammar/Oral Writ Exprsn	3
FRCH 350	French Civ & Culture	3
Total Hours		6

Course List

Minimum Required Grade: C-

Degree Electives

Rule: Complete the following subcategories. 9 total credits required.

300-Level Courses

CODE	TITLE	HOURS
Complete two of the following courses:		6
FRCH 310	Fr. Lit. Cult. Mid. Age Renass	
FRCH 311	Fr. Lit. Cult. 17th 18th Cent.	
FRCH 312	Fr. Lit. Cult. Long 19th Cent.	
FRCH 313	Literature and Culture III: French and Francophone Literatures and Cultures of the 20th Century	
FRCH 338	The French Cinema	
Total Hours		6

Course List

Minimum Required Grade: C-

400-Level Courses

CODE	TITLE	HOURS
Complete 3 credits from the following courses:		3
FRCH 420	Studies in French Prose	
FRCH 421	Adv Stylistics & Oral Arg	
FRCH 430	Studies in French Drama	
FRCH 440	Studies in French Poetry	
FRCH 491	Special Topics	
FRCH 492	Independent Study	
FRCH 494	Seminar/Workshop	
Total Hours		3

Course List

Minimum Required Grade: C-

Teaching French Track

Notes:

- This teaching track contains different/additional course requirements designed to meet state standards. Those interested in teaching in K-12 schools must complete the teaching track of a major in a teaching content area plus the Teacher Education Program through the Department of Teaching and Learning. Additional teaching areas can be added through completion of the teaching track of a major or minor in that content area.
  - Secondary Education Licensure Program
  - Licensure Degree Requirements
- To complete this teaching track, you need to contact the Teaching and Learning Department. You do not fill out a major/minor form for graduation or the major/minor/concentration section of the major change form. Approvals for this track must come from the Teaching and Learning Department.
- Tracks will not appear on your UM transcript, diploma, university lists, student data system, or university publications. They are used for advising purposes only. You do not fill out a major change for a track.
- Individuals completing the teaching track of this minor must also complete the teaching track of a major in another teaching content area.

Teaching French Track Requirements

CODE	TITLE	HOURS
Complete all of the following courses:		
LING 270S	Intro to Linguistics	3
MCLG 410	Methods Teaching Foreign Language	3
Total Hours		6

Course List

Minimum Required Grade: C-

Secondary Teaching Licensure

Note: For endorsement to teach French, a student also must gain admission to the Teacher Education Program and meet all the requirements for secondary teaching licensure. For more information, see the Teaching and Learning Department.

German B.A.

Bachelor of Arts - German

College of Humanities & Sciences

Degree Specific Credits: 46-47

Required Cumulative GPA: 2.5

Catalog Year: 2019-2020

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.

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

Course List		
CODE	**TITLE**	**HOURS**
Language Core		16
Upper-Division Core Courses		21-22
German Culture, Film, and Literature Electives		9
Teaching German Track		
Total Hours		46-47

Language Core

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
GRMN 101	Elementary German I	4
GRMN 102	Elementary German II	4
GRMN 201	Intermediate German I	4
GRMN 202	Intermediate German II	4
Total Hours		16

Minimum Required Grade: C-

Upper-Division Core Courses

Rule: Must complete all of the following subcategories. 21-22 total credits required.

Subcategory 1

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
GRMN 301	German: Oral and Written Expression I	3
GRMN 311	Introduction to German Literature	3
Total Hours		6

Minimum Required Grade: C-

Subcategory 2

Course List		
CODE	**TITLE**	**HOURS**
Complete 1 of the following courses:		
GRMN 302	German Oral & Written Expresion II	3-4
or GRMN 305	Practicum in German Language	
Total Hours		3-4

Minimum Required Grade: C-

Subcategory 3

Course List		
CODE	**TITLE**	**HOURS**
Complete the following course:		
GRMN 312	Introduction to German Literature: Drama/Poetry	3
Total Hours		3

Minimum Required Grade: C-

Subcategory 4

Course List		
CODE	**TITLE**	**HOURS**
Complete the following course:		
LING 270S	Intro to Linguistics	3
Total Hours		3

Minimum Required Grade: C-

Subcategory 5

Course List		
CODE	**TITLE**	**HOURS**
Complete two of the following courses:		6
GRMN 431	German Literature 1760-1832	
GRMN 441	19th Century German Literature	
GRMN 451	20th Century German Literature to 1945	
GRMN 452	20th Century German Literature Since 1945	
GRMN 453	German Literature Since Unification	
GRMN 491	Special Topics	
Total Hours		6

Minimum Required Grade: C-

German Culture, Film, and Literature Electives

Rule: May substitute a 400-level course with consent of instructor

Note: The upper-division writing expectation must be met by successfully completing either GRMN 351H or GRMN 352H.

Course List		
CODE	**TITLE**	**HOURS**
Complete three of the following courses:		9
GRMN 317L	Introduction to Multicultural Literature in Contemporary Germany	
GRMN 322L	Survey of German Cinema	
GRMN 340L	Nature and the Environment in German Literature and Film	
GRMN 350	German Culture & Civilization	
GRMN 351H	German Culture: Beginnings to Romanticism	
GRMN 352H	Germ Culture: Romanticism to the Present	
Total Hours		9

Minimum Required Grade: C-

Teaching German Track

Notes:

- This teaching track contains different/additional course requirements designed to meet state standards. Those interested in teaching in K-12 schools must complete the teaching track of a major in a teaching content area plus the Teacher Education Program through the Department of Teaching and Learning. Additional teaching areas can be added through completion of the teaching track of a major or minor in that content area.
    - Secondary Education Licensure Program
    - Licensure Degree Requirements
- To complete this teaching track, you need to contact the Teaching and Learning Department. You do not fill out a major/minor form for graduation or the major/minor/concentration section of the major change form. Approvals for this track must come from the Teaching and Learning Department.

- Tracks will not appear on your UM transcript, diploma, university lists, student data system, or university publications. They are used for advising purposes only. You do not fill out a major change for a track.
- 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 in another field in more demand in high schools.
- 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.

Teaching German Track Requirements

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
LING 270S	Intro to Linguistics	3
MCLG 410	Methods Teaching Foreign Language	3
Total Hours		6

Minimum Required Grade: C-

Secondary Teaching Licensure

Note: For endorsement to teach German, a student also must gain admission to the Teacher Education Program and meet all the requirements for secondary teaching licensure. For more information, see the Teaching and Learning Department.

German Minor

Minor - German

College of Humanities & Sciences

Degree Specific Credits: 31-32

Required Cumulative GPA: 2.5

Catalog Year: 2019-2020

Summary

Course List		
CODE	**TITLE**	**HOURS**
Language Core		16
Upper-Division Core Courses		12-13
German Culture, Film, and Literature Electives		3
Teaching German Track		
Total Hours		31-32

Language Core

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
GRMN 101	Elementary German I	4
GRMN 102	Elementary German II	4
GRMN 201	Intermediate German I	4
GRMN 202	Intermediate German II	4
Total Hours		16

Minimum Required Grade: C-

Upper-Division Core Courses

Rule: Complete all of the following subcategories. 12-13 total credits required.

Note: Native or near-native speakers of German must substitute two 400-level literature courses for GRMN 301 and GRMN 302.

Subcategory 1

		Course List
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
GRMN 301	German: Oral and Written Expression I	3
GRMN 311	Introduction to German Literature	3
Total Hours		6

Minimum Required Grade: C-

Subcategory 2

		Course List
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		
GRMN 302	German: Oral and Written Expression II	3-4
or GRMN 305	Practicum in German Language	
Total Hours		3-4

Minimum Required Grade: C-

Subcategory 3

Course List		
CODE	**TITLE**	**HOURS**
Complete the following course:		
GRMN 312	Introduction to German Literature: Drama/Poetry	3
Total Hours		3

Minimum Required Grade: C-

German Culture, Film, and Literature Electives

Course List		
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		3
GRMN 317L	Introduction to Multicultural Literature in Contemporary Germany	
GRMN 322L	Survey of German Cinema	
GRMN 340L	Nature and the Environment in German Literature and Film	
GRMN 350	German Culture & Civilization	
GRMN 351H	German Culture: Beginnings to Romanticism	
GRMN 352H	Germ Culture: Romanticism to the Present	
Total Hours		3

Minimum Required Grade: C-

Teaching German Track

Notes:

- This teaching track contains different/additional course requirements designed to meet state standards. Those interested in teaching in K-12 schools must complete the teaching track of a major in a teaching content area plus the Teacher Education Program through the Department of Teaching and Learning. Additional teaching areas can be added through completion of the teaching track of a major or minor in that content area.
    - Secondary Education Licensure Program
    - Licensure Degree Requirements
- To complete this teaching track, you need to contact the Teaching and Learning Department. You do not fill out a major/minor form for graduation or the major/minor/concentration section of the major change form. Approvals for this track must come from the Teaching and Learning Department.
- Tracks will not appear on your UM transcript, diploma, university lists, student data system, or university publications. They are used for advising purposes only. You do not fill out a major change for a track.
- Individuals completing the teaching track of this minor must also complete the teaching track of a major in another teaching content area.

Teaching German Track Requirements

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
LING 270S	Intro to Linguistics	3
MCLG 410	Methods Teaching Foreign Language	3
Total Hours		6

Minimum Required Grade: C-

Secondary Teaching Licensure

Note: For endorsement to teach German, a student also must gain admission to the Teacher Education Program and meet all the requirements for secondary teaching licensure. For more information, see the Teaching and Learning Department.

Greek Minor < University of Montana

Greek Minor

Minor - Greek

College of Humanities & Sciences

Degree Specific Credits: 21

Required Cumulative GPA: 2.5

Catalog Year: 2019-2020

Summary

CODE	TITLE	HOURS
Lower-Division Required Courses		12
Upper-Division Required Courses		9
Total Hours		21

Course List

Lower-Division Required Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
GRK 101	Elementary Greek I	3
GRK 102	Elementary Greek II	3
GRK 201	Intermediate Greek I	3
GRK 202	Intermediate Greek II	3
Total Hours		12

Course List

Minimum Required Grade: C-

Upper-Division Required Courses

CODE	TITLE	HOURS
Complete 9 credits from the following courses:		9
GRK 300	Major Greek Writers	
GRK 391	Special Topics	
GRK 392	Independent Study	
GRK 492	Independent Study	
Total Hours		9

Course List

Minimum Required Grade: C-

Japanese B.A. < University of Montana

Japanese B.A.

Bachelor of Arts - Japanese

College of Humanities & Sciences

Degree Specific Credits: 55

Required Cumulative GPA: 2.5

Catalog Year: 2019-2020

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.

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

CODE	TITLE	HOURS
Lower-Division Core Courses		29
Language Core		
Culture and Civilization Core		
East Asian Studies		
Upper-Division Core Courses		14
Major Electives		12
Total Hours		55

Course List

Lower-Division Core Courses

Rule: Complete the following subcategories. 29 total credits required.

Language Core

CODE	TITLE	HOURS
Complete all of the following courses:		
JPNS 101	Elementary Japanese I	5
JPNS 102	Elementary Japanese II	5
JPNS 201	Intermediate Japanese I	5
JPNS 202	Intermediate Japanese II	5
Total Hours		20

Course List

Minimum Required Grade: C-

Culture and Civilization Core

Rule: Must complete the following course:

CODE	TITLE	HOURS
Complete the following course:		
JPNS 150H	Japanese Cult & Civiliz	3
Total Hours		3

Course List

Minimum Required Grade: C-

East Asian Studies

CODE	TITLE	HOURS
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.		6
CHIN 313L	Chinese Poetry in Translation	
CHIN 380	Chinese Folktales	
GH 161H	Asian Humanities	
PSCI 311	Rev & Reform Modern China	
PSCI 420	Exp Offering: Comp Politics	
RLST 232H	Buddhism	
RLST 238X	Japanese Religions	
RLST 354	Topics in East Asia Religions	

Course List

Upper-Division Core Courses

Note: Either JPNS 412 or JPNS 415 may be taken to complete the 14 credits. JPNS 411 is repeatable once.

CODE	TITLE	HOURS
Complete all of the following courses:		
JPNS 301	Advanced Japanese	4
JPNS 302	Advanced Japanese	4
JPNS 411	Mod Jpns Wrtrs/Thinkers (repeatable once)	3
JPNS 412	Intro Classical Japanese	3
or JPNS 415	Adv Jpns for Professionals	
Total Hours		14

Course List

Minimum Required Grade: C-

Major Electives

Note:

- JPNS 392 may be taken for up to 3 credits only.
- Only 3 credits from JPNS 390 or JPNS 392 may count towards the 9 credits.
- JPNS 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.

CODE	TITLE	HOURS
Complete 12 credits from the following courses:		12
JPNS 311	Jpns Clasc Lit Engl Trans	
JPNS 312	Jpns Lit Medieval to Mod	
JPNS 371	Japanese Film and Anime	
JPNS 390	Research	
JPNS 391	Special Topics	
JPNS 392	Independent Study	
JPNS 431	Post-War Japanese Lit	
JPNS 491	Special Topics	
JPNS 492	Independent Study	
Total Hours		12

Course List

Minimum Required Grade: C-

Japanese Minor < University of Montana

Japanese Minor

Minor - Japanese

College of Humanities & Sciences

Degree Specific Credits: 32

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Summary

CODE	TITLE	HOURS
Lower-Division Core Courses		23
Upper-Division Elective Courses		9
Total Hours		32

Course List

Lower-Division Core Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
JPNS 101	Elementary Japanese I	5
JPNS 102	Elementary Japanese II	5
JPNS 150H	Japanese Cult & Civiliz	3
JPNS 201	Intermediate Japanese I	5
JPNS 202	Intermediate Japanese II	5
Total Hours		23

Course List

Minimum Required Grade: C-

Upper-Division Elective Courses

Note:

- JPNS 392 may be taken for up to 3 credits only.
- Only 3 credits from JPNS 390 or JPNS 392 may count toward the 9 credits.
- If offered, JPNS 191, JPNS 291 or UD language courses such as JPNS 301 and/or JPNS 302 may be taken in place of up to 2 of the below electives.
- Also permitted in substitution would be 1 course from outside the department if it has a substantial Ease Asia-related element.

CODE	TITLE	HOURS
Complete 9 credits from the following courses:		9
JPNS 311	Jpns Clasc Lit Engl Trans	
JPNS 312	Jpns Lit Medieval to Mod	
JPNS 371	Japanese Film and Anime	
JPNS 390	Research	
JPNS 391	Special Topics	
JPNS 392	Independent Study	
JPNS 411	Mod Jpns Wrtrs/Thinkers	
JPNS 412	Intro Classical Japanese	
JPNS 431	Post-War Japanese Lit	
JPNS 491	Special Topics	
Total Hours		9

Course List

Minimum Required Grade: C-

Latin American Studies Minor < University of Montana

Latin American Studies Minor

Minor - Latin American Studies

College of Humanities & Sciences

Degree Specific Credits: 30

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Summary

CODE	TITLE	HOURS
Lower-Division Core Courses		15
Upper-Division Electives		15
Total Hours		30

Course List

Lower-Division Core Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
ANTY 103H	Intro Latin American Studies	3
SPNS 101	Elementary Spanish I	4
SPNS 102	Elementary Spanish II	4
SPNS 201	Intermediate Spanish I	4
Total Hours		15

Course List

Minimum Required Grade: C-

Upper-Division Electives

CODE	TITLE	HOURS
Complete 15 credits from the following courses:		15
ANTY 354H	Mesoamerican Prehistory	
ARTH 433H	Ancient American Art	
ARTH 434	Latin American Art	
ARTH 494	Sem Art Hist & Crit	
ENST 493	Study Abroad: Environmental Justice Latin America	
HSTR 230H	Colonial Latin America	
HSTR 231H	Modern Latin America	
HSTR 334	Latin America: Reform & Revolution	
HSTR 335	Latin America: Workers & Labor	
HSTR 435	Lat Am Human Rgts & Memory	
HSTR 437	US-Latin America Relations	
MCLG 358	Lat Amer Civ Thru Lit/Film	
PSCI 325	Politics of Latin America	
PSCI 327	Politics of Mexico	
PSCI 463	Development Administration	
S W 323	Women & Soc Action Amer	
SPNS 331	Cultures and Societies of Latin America	
SPNS 432	Latin American Literature	
SPNS 494	Seminar	
Total Hours		15

Course List

Minimum Required Grade: C-

Latin Minor < University of Montana

Latin Minor

Minor - Latin

College of Humanities & Sciences

Degree Specific Credits: 21

Required Cumulative GPA: 2.5

Catalog Year: 2019-2020

Summary

CODE	TITLE	HOURS
Lower-Division Required Courses		12
Upper-Division Required Courses		9
Teaching Latin Track		
Total Hours		21

Course List

Lower-Division Required Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
LATN 101	Elementary Latin I	3
LATN 102	Elementary Latin II	3
LATN 201	Intermediate Latin I	3
LATN 202	Intermediate Latin II	3
Total Hours		12

Course List

Minimum Required Grade: C-

Upper-Division Required Courses

CODE	TITLE	HOURS
Complete 9 credits from the following courses:		9
LATN 311	Major Latin Authors	
LATN 391	Special Topics	
LATN 392	Independent Study	
LATN 492	Independent Study	
Total Hours		9

Course List

Minimum Required Grade: C-

Teaching Latin Track

Notes:

- This teaching track contains different/additional course requirements designed to meet state standards. Those interested in teaching in K-12 schools must complete the teaching track of a major in a teaching content area plus the Teacher Education Program through the Department of Teaching and Learning. Additional teaching areas can be added through completion of the teaching track of a major or minor in that content area.
  - Secondary Education Licensure Program
  - Licensure Degree Requirements
- To complete this teaching track, you need to contact the Teaching and Learning Department. You do not fill out a major/minor form for graduation or the major/minor/concentration section of the major change form. Approvals for this track must come from the Teaching and Learning Department.
- Tracks will not appear on your UM transcript, diploma, university lists, student data system, or university publications. They are used for advising purposes only. You do not fill out a major change for a track.
- Individuals completing the teaching track of this minor must also complete the teaching track of a major in another teaching content area.

Teaching Latin Track Requirements

CODE	TITLE	HOURS
Complete the following course:		
MCLG 410	Methods Teaching Foreign Language	3
Total Hours		3

Course List

Minimum Required Grade: C-

Secondary Teaching Licensure

Note: For endorsement to teach Latin, a student also must gain admission to the Teacher Education Program and meet all the requirements for secondary teaching licensure. For more information, see the Teaching and Learning Department.

Russian B.A. < University of Montana

Russian B.A.

Bachelor of Arts - Russian

College of Humanities & Sciences

Degree Specific Credits: 46

Required Cumulative GPA: 2.5

Catalog Year: 2019-2020

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.

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

CODE	TITLE	HOURS
Lower-Division Core Courses		19
Language		
Culture		
Upper-Division Core Courses		27
Expression		
Translation		
Language		
History		
Teaching Russian Track		
Total Hours		46

Course List

Lower-Division Core Courses

Rule: Complete the following subcategories of courses. 21 total credits required.

Language

CODE	TITLE	HOURS
Complete all of the following courses:		
RUSS 101	Elementary Russian I	4
RUSS 102	Elementary Russian II	4
RUSS 201	Intermediate Russian I	4
RUSS 202	Intermediate Russian II	4
Total Hours		16

Course List

Minimum Required Grade: C-

Culture

CODE	TITLE	HOURS
Complete the following course		
RUSS 105H	Intro to Russian Culture	3
Total Hours		3

Course List

Minimum Required Grade: C-

Upper-Division Core Courses

Rule: Complete the following subcategories. 27 total credits required.

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.

Translation

Note: RUSS 494 must be taken for 3 credits and will fulfill the upper division writing requirement.

CODE	TITLE	HOURS
Complete two of the following courses:		6
FILM 308	Russian Cinema and Culture	
RUSS 306L	Evil and the Supernatural in Russian Literature	
RUSS 307L	Beauty, Power and Pride in Russian Literature	
Total Hours		6

Course List

Minimum Required Grade: C-

Language

CODE	TITLE	HOURS
Complete three of the following courses:		9
RUSS 411	19th-Century Russian Authors	
RUSS 412	20th-Century Russian Authors	
RUSS 424	Russian Short Story	
RUSS 440	Russian Poetry	
Total Hours		9

Course List

Minimum Required Grade: C-

History

CODE	TITLE	HOURS
Complete one of the following courses:		3
HSTR 357	Russia to 1881	
HSTR 358	Russia Since 1881	
Total Hours		3

Course List

Minimum Required Grade: C-

Teaching Russian Track

Notes:

- This teaching track contains different/additional course requirements designed to meet state standards. Those interested in teaching in K-12 schools must complete the teaching track of a major in a teaching content area plus the Teacher Education Program through the Department of Teaching and Learning. Additional teaching areas can be added through completion of the teaching track of a major or minor in that content area.
  - Secondary Education Licensure Program
  - Licensure Degree Requirements
- To complete this teaching track, you need to contact the Teaching and Learning Department. You do not fill out a major/minor form for graduation or the major/minor/concentration section of the major change form. Approvals for this track must come from the Teaching and Learning Department.
- Tracks will not appear on your UM transcript, diploma, university lists, student data system, or university publications. They are used for advising purposes only. You do not fill out a major change for a track.

Teaching Russian Track Requirement

CODE	TITLE	HOURS
Complete the following course:		
MCLG 410	Methods Teaching Foreign Language	3
Total Hours		3

Course List

Minimum Required Grade: C-

Secondary Teaching Licensure

Note: For endorsement to teach Russian, a student also must gain admission to the Teacher Education Program and meet all the requirements for secondary teaching licensure. For more information, see the Teaching and Learning Department.

Russian Minor < University of Montana

Russian Minor

Minor - Russian

College of Humanities & Sciences

Degree Specific Credits: 28

Required Cumulative GPA: 2.5

Catalog Year: 2019-2020

Summary

CODE	TITLE	HOURS
Lower-Division Core Requirements		16
Upper-Division Credits		12
Teaching Russian Track		
Total Hours		28

Course List

Lower-Division Core Requirements

CODE	TITLE	HOURS
Complete all of the following courses:		
RUSS 101	Elementary Russian I	4
RUSS 102	Elementary Russian II	4
RUSS 201	Intermediate Russian I	4
RUSS 202	Intermediate Russian II	4
Total Hours		16

Course List

Minimum Required Grade: C -

Upper-Division Credits

CODE	TITLE	HOURS
Complete 12 upper-division credits in Russian-related courses taught by MCLL faculty or equivalent.		12

Course List

Minimum Required Grade: C-

Teaching Russian Track

Notes:

- This teaching track contains different/additional course requirements designed to meet state standards. Those interested in teaching in K-12 schools must complete the teaching track of a major in a teaching content area plus the Teacher Education Program through the Department of Teaching and Learning. Additional teaching areas can be added through completion of the teaching track of a major or minor in that content area.
  - Secondary Education Licensure Program
  - Licensure Degree Requirements
- To complete this teaching track, you need to contact the Teaching and Learning Department. You do not fill out a major/minor form for graduation or the major/minor/concentration section of the major change form. Approvals for this track must come from the Teaching and Learning Department.
- Tracks will not appear on your UM transcript, diploma, university lists, student data system, or university publications. They are used for advising purposes only. You do not fill out a major change for a track.
- Individuals completing the teaching track of this minor must also complete the teaching track of a major in another teaching content area.

Teaching Russian Track Requirement

CODE	TITLE	HOURS
Complete the following course:		
MCLG 410	Methods Teaching Foreign Language	3
Total Hours		3

Course List

Minimum Required Grade: C-

Secondary Teaching Licensure

Note: For endorsement to teach Russian, a student also must gain admission to the Teacher Education Program and meet all the requirements for secondary teaching licensure. For more information, see the Teaching and Learning Department.

Russian Studies Minor < University of Montana

Russian Studies Minor

Minor - Russian Studies

College of Humanities & Sciences

Degree Specific Credits: 28

Required Cumulative GPA: 2.5

Catalog Year: 2019-2020

Summary

CODE	TITLE	HOURS
Lower-Division Core Courses		19
Language		
Culture		
Minor Electives		9
History		
Russian Electives		
Total Hours		28

Course List

Lower Division Core Courses

Rule: Must complete the following subcategories. 19 total credits required.

Language

CODE	TITLE	HOURS
Complete all of the following courses:		
RUSS 101	Elementary Russian I	4
RUSS 102	Elementary Russian II	4
RUSS 201	Intermediate Russian I	4
RUSS 202	Intermediate Russian II	4
Total Hours		16

Course List

Minimum Required Grade: C-

Culture

CODE	TITLE	HOURS
Complete the following course:		
RUSS 105H	Intro to Russian Culture	3
Total Hours		3

Course List

Minimum Required Grade: C-

Minor Electives

Rule: Complete the following subcategories. 9 total credits required.

History

CODE	TITLE	HOURS
Complete one of the following courses:		3
HSTR 357	Russia to 1881	
HSTR 358	Russia Since 1881	
Total Hours		3

Course List

Minimum Required Grade: C-

Russian Electives

CODE	TITLE	HOURS
Must complete 6 credits of upper-division coursework. 3 of the 6 credits must be taken in the MCLL department and 3 from another department/discipline besides History. Speak with your minor advisor about which courses will fulfill this requirement.		6
Total Hours		6

Course List

Minimum Required Grade: C-

Spanish B.A. < University of Montana

Spanish B.A.

Bachelor of Arts - Spanish

College of Humanities & Sciences

Degree Specific Credits: 49

Required Cumulative GPA: 2.5

Catalog Year: 2019-2020

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.

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

CODE	TITLE	HOURS
Lower-Division Core Courses		16
Upper-Division Core Courses		9
Additional Upper-Division Spanish Electives		21
Upper-Division Writing		3
Teaching Spanish Track		
Total Hours		49

Course List

Lower-Division Core Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
SPNS 101	Elementary Spanish I	4
SPNS 102	Elementary Spanish II	4
SPNS 201	Intermediate Spanish I	4
SPNS 202	Intermediate Spanish II	4
Total Hours		16

Course List

Minimum Required Grade: C-

Upper-Division Core 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

CODE	TITLE	HOURS
Complete all of the following courses:		
SPNS 301	Spanish: Oral and Written Expr	3
SPNS 326	Contemporary Spanish Lit	3
SPNS 331	Cultures and Societies of Latin America	3
Total Hours		9

Course List

Minimum Required Grade: C-

Additional Upper-Division Spanish Electives

Note: 9 credits need to be 400 level content courses: SPNS 400, SPNS 432, SPNS 465, SPNS 466, SPNS 491, SPNS 492 or SPNS 494. The remaining 12 credits could be completed by taking any combination of the upper-division elective courses.

CODE	TITLE	HOURS
Complete 21 credits of upper-division courses in Spanish.		21
Total Hours		21

Course List

Upper-Division Writing Requirement

CODE	TITLE	HOURS
Complete the following course:		
MCLG 315	Major Hispanic Authors	3
Total Hours		3

Course List

Minimum Required Grade: C-

Teaching Spanish Track

Notes:

- This teaching track contains different/additional course requirements designed to meet state standards. Those interested in teaching in K-12 schools must complete the teaching track of a major in a teaching content area plus the Teacher Education Program through the Department of Teaching and Learning. Additional teaching areas can be added through completion of the teaching track of a major or minor in that content area.
  - Secondary Education Licensure Program
  - Licensure Degree Requirements
- To complete this teaching track, you need to contact the Teaching and Learning Department. You do not fill out a major/minor form for graduation or the major/minor/concentration section of the major change form. Approvals for this track must come from the Teaching and Learning Department.
- Tracks will not appear on your UM transcript, diploma, university lists, student data system, or university publications. They are used for advising purposes only. You do not fill out a major change for a track.
- 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 in another field in more demand in high schools.

- 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.

Teaching Spanish Track Requirements

CODE	TITLE	HOURS
Complete all of the following courses:		
LING 270S	Intro to Linguistics	3
MCLG 410	Methods Teaching Foreign Language	3
SPNS 305	Spanish Phonetics	3
SPNS 400	Introduction to Spanish Linguistics	3
SPNS 408	Spanish: Adv Comp & Conversat	3
Total Hours		15

Course List

Minimum Required Grade: C-

Secondary Teaching Licensure

Note: For endorsement to teach Spanish, a student also must gain admission to the Teacher Education Program and meet all the requirements for secondary teaching licensure. For more information, see the Teaching and Learning Department.

Spanish Minor < University of Montana

Spanish Minor

Minor - Spanish

College of Humanities & Sciences

Degree Specific Credits: 34

Required Cumulative GPA: 2.5

Catalog Year: 2019-2020

Summary

CODE	TITLE	HOURS
Lower-Division Core		16
Upper-Division Core		6
Expression		
Literature		
Upper-Division Electives		12
Literature and Linguistics		
Additional Electives		
Teaching Spanish Track		
Total Hours		34

Course List

Lower-Division Core

CODE	TITLE	HOURS
Complete all of the following courses:		
SPNS 101	Elementary Spanish I	4
SPNS 102	Elementary Spanish II	4
SPNS 201	Intermediate Spanish I	4
SPNS 202	Intermediate Spanish II	4
Total Hours		16

Course List

Minimum Required Grade: C-

Upper-Division Core

Rule: Must complete all of the following subcategories. 6 total credits required.

Expression

CODE	TITLE	HOURS
Complete the following course:		
SPNS 301	Spanish: Oral and Written Expr	3
Total Hours		3

Course List

Minimum Required Grade: C-

Literature

CODE	TITLE	HOURS
Complete 1 of the following courses:		
SPNS 326	Contemporary Spanish Lit	3
or SPNS 331	Cultures and Societies of Latin America	
Total Hours		3

Course List

Minimum Required Grade: C-

Upper Division Electives

Rule: Complete the following subcategories. 12 total credits required.

Literature and Linguistics

CODE	TITLE	HOURS
Complete one of the following courses:		3
SPNS 400	Introduction to Spanish Linguistics	
SPNS 432	Latin American Literature	
SPNS 465	Spanish Lit:Renaiss/Goldn Age	
SPNS 466	Spanish Lit:Modern & Contemp	
SPNS 494	Seminar	
Total Hours		3

Course List

Minimum Required Grade: C-

Additional Electives

CODE	TITLE	HOURS
Complete 9 credits of additional upper-division SPNS electives.		9
Total Hours		9

Course List

Minimum Required Grade: C-

Teaching Spanish Track

Notes:

- This teaching track contains different/additional course requirements designed to meet state standards. Those interested in teaching in K-12 schools must complete the teaching track of a major in a teaching content area plus the Teacher Education Program through the Department of Teaching and Learning. Additional teaching areas can be added through completion of the teaching track of a major or minor in that content area.
  - Secondary Education Licensure Program
  - Licensure Degree Requirements
- To complete this teaching track, you need to contact the Teaching and Learning Department. You do not fill out a major/minor form for graduation or the major/minor/concentration section of the major change form. Approvals for this track must come from the Teaching and Learning Department.
- Tracks will not appear on your UM transcript, diploma, university lists, student data system, or university publications. They are used for advising purposes only. You do not fill out a major change for a track.
- Individuals completing the teaching track of this minor must also complete the teaching track of a major in another teaching content area.
- 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.

Teaching Spanish Track Requirements

CODE	TITLE	HOURS
Complete all of the following courses:		
LING 270S	Intro to Linguistics	3
MCLG 410	Methods Teaching Foreign Language	3
SPNS 305	Spanish Phonetics	3
SPNS 400	Introduction to Spanish Linguistics	3
Total Hours		12

Course List

Minimum Required Grade: C-

Secondary Teaching Licensure

Note: For endorsement to teach Spanish, a student also must gain admission to the Teacher Education Program and meet all the requirements for secondary teaching licensure. For more information, see the Teaching and Learning Department.

World Competencies Certificate < University of Montana

World Competencies Certificate

- Overview
- Requirements

The Certificate in World Competencies will encourage students to be more informed about regions around the world. It will also hone their analytic, as well linguistic skills.

Post-Secondary Certificate - World Competencies

College of Humanities & Sciences

Degree Specific Credits: 21-26, depending on the choice of language

Required Cumulative GPA: 2.0

Catalog Year: 2019-20

Note: A programmatic international experience, for example, study abroad, can be applied to these requirements.

Summary

CODE	TITLE	HOURS
Language Requirement		16-20
Cultural Studies Requirement		3
Global/Regional Issues Requirement		3
Activities Requirement [see requirement below]		0
Total Hours		22-26

Course List

Language Requirement

CODE	TITLE	HOURS
Complete four semesters of one of the following languages:		16-20
Arabic		
ARAB 101	Elementary Modern Standard Arabic I	
ARAB 102	Elementary Modern Standard Arabic II	
ARAB 201	Intermediate Modern Standard Arabic I	
ARAB 202	Intermediate Modern Standard Arabic II	
Chinese		
CHIN 101	Elementary Chinese I	
CHIN 102	Elementary Chinese II	
CHIN 201	Intermediate Chinese I	

CODE	TITLE	HOURS
CHIN 202	Intermediate Chinese II	
French		
FRCH 101	Elementary French I	
FRCH 102	Elementary French II	
FRCH 201	Intermediate French I	
FRCH 202	Intermediate French II	
German		
GRMN 101	Elementary German I	
GRMN 102	Elementary German II	
GRMN 201	Intermediate German I	
GRMN 202	Intermediate German II	
Japanese		
JPNS 101	Elementary Japanese I	
JPNS 102	Elementary Japanese II	
JPNS 201	Intermediate Japanese I	
JPNS 202	Intermediate Japanese II	
Latin		
LATN 101	Elementary Latin I	
LATN 102	Elementary Latin II	
LATN 201	Intermediate Latin I	
LATN 202	Intermediate Latin II	
Russian		
RUSS 101	Elementary Russian I	
RUSS 102	Elementary Russian II	
RUSS 201	Intermediate Russian I	
RUSS 202	Intermediate Russian II	
Spanish		
SPNS 101	Elementary Spanish I	
SPNS 102	Elementary Spanish II	
SPNS 201	Intermediate Spanish I	
SPNS 202	Intermediate Spanish II	
Total Hours		16-20

Course List

Minimum Required Grade: C-	CODE	TITLE	HOURS

Cultural Studies Requirement

Note: The course meeting this requirement should be in the language or the area of expertise, taught either in English or the target language.

CODE	TITLE	HOURS
Complete one of the following courses:		3
Arabic Studies		
ARAB 305	The Arab World	
Chinese Studies		
CHIN 313L	Chinese Poetry in Translation	
CHIN 380	Chinese Folktales	
French Studies		
FRCH 300	Intro to Literature in French	
FRCH 310	Fr. Lit. Cult. Mid. Age Renass	
FRCH 311	Fr. Lit. Cult. 17th 18th Cent.	
FRCH 312	Fr. Lit. Cult. Long 19th Cent.	
FRCH 313	Literature and Culture III: French and Francophone Literatures and Cultures of the 20th Century	
FRCH 338	The French Cinema	
FRCH 339	Surv African Cinema	
FRCH 420	Studies in French Prose	
FRCH 430	Studies in French Drama	
FRCH 440	Studies in French Poetry	
German Studies		
GRMN 106H	Introduction to German Culture and Civilization	
GRMN 311	Introduction to German Literature	
GRMN 312	Introduction to German Literature: Drama/Poetry	
GRMN 317L	Introduction to Multicultural Literature in Contemporary Germany	
GRMN 322L	Survey of German Cinema	
GRMN 340L	Nature and the Environment in German Literature and Film	
GRMN 350	German Culture & Civilization	
GRMN 351H	German Culture: Beginnings to Romanticism	
GRMN 352H	Germ Culture: Romanticism to the Present	
GRMN 431	German Literature 1760-1832	

CODE	TITLE	HOURS
GRMN 441	19th Century German Literature	
GRMN 451	20th Century German Literature to 1945	
GRMN 452	20th Century German Literature Since 1945	
GRMN 453	German Literature Since Unification	
Japanese Studies		
JPNS 301	Advanced Japanese	
JPNS 302	Advanced Japanese	
JPNS 311	Jpns Clasc Lit Engl Trans	
JPNS 312	Jpns Lit Medieval to Mod	
JPNS 371	Japanese Film and Anime	
JPNS 411	Mod Jpns Wrtrs/Thinkers	
JPNS 412	Intro Classical Japanese	
JPNS 415	Adv Jpns for Professionals	
JPNS 431	Post-War Japanese Lit	
Latin/Classical Studies		
CLAS 160L	Classical Mythology	
CLAS 251L	The Epic	
CLAS 252L	Greek Drama: Politics on Stage	
HSTR 302H	Ancient Greece	
HSTR 304H	Ancient Rome	
Russian Studies		
FILM 308	Russian Cinema and Culture	
HSTR 357	Russia to 1881	
HSTR 358	Russia Since 1881	
RUSS 105H	Intro to Russian Culture	
RUSS 306L	Evil and the Supernatural in Russian Literature	
RUSS 307L	Beauty, Power and Pride in Russian Literature	
RUSS 411	19th-Century Russian Authors	
RUSS 412	20th-Century Russian Authors	
RUSS 424	Russian Short Story	
RUSS 440	Russian Poetry	
Spanish/Latin American Studies		

CODE	TITLE	HOURS
MCLG 315	Major Hispanic Authors	
SPNS 301	Spanish: Oral and Written Expr	
SPNS 326	Contemporary Spanish Lit	
SPNS 331	Cultures and Societies of Latin America	
Total Hours		3

Course List

Minimum Required Grade: C-

Global/Regional Issues Requirement

Note: Other courses may fulfill this requirement at the discretion of the certificate advisor.

CODE	TITLE	HOURS
Complete one of the following courses:		3
ANTY 102H	Intro to South & S. East Asia	
ANTY 141H	The Silk Road	
ANTY 241H	Central Asian Culture and Civ	
ANTY 250S	Intro to Archaeology	
ANTY 251H	Foundations of Civilization	
ANTY 254H	Arch Wonders of the World	
ANTY 330X	Peoples and Cultures of World	
ARTH 200H	Art of World Civilization I	
ARTH 201H	Art of World Civilization II	
BGEN 360	International Business	
ENST 230H	Nature and Society	
GPHY 121S	Human Geography	
GPHY 141S	Geography of World Regions	
GPHY 245X	The Middle East	
GPHY 347	Regional Geography (Multiple Regions)	
GBLD 194	Seminar	
GBLD 294	Seminar	
HSTR 101H	Western Civilization I	
HSTR 102H	Western Civilization II	
HSTR 103H	Honors Western Civilization I	
HSTR 104H	Honors Western Civilization II	

CODE	TITLE	HOURS
HSTR 230H	Colonial Latin America	
HSTR 231H	Modern Latin America	
HSTR 240H	East Asian Civilizations	
HSTR 241H	Central Asian Cult & Civ	
HSTR 262H	Islamic Civil: Classical Age	
HSTR 264H	Islamic Civ: Modrn Era	
HSTR 272E	Terrorism:Viol Mod Wrld	
HSTR 334	Latin America: Reform & Revolution	
HSTR 345H	Modern China	
HSTR 368	Iran Between Two Revolutions	
HSTR 386	Nationalism Modern Middle East	
IRSH 249	The Irish	
IRSH 345L	Literature in the Irish Lang	
IRSH 360	Irish/N Irish Literature	
LIT 349L	Medieval Lit	
LIT 350L	Chaucer	
LIT 353L	Milton	
LIT 355	British Romanticism	
PSCI 220S	Intro to Comparative Government	
PSCI 230X	Intro to International Relations	
PSCI 311	Rev & Reform Modern China	
PSCI 322	Politics of Europe	
PSCI 324	Climate Policies: China & U.S.	
PSCI 325	Politics of Latin America	
PSCI 326	Politics of Africa	
PSCI 327	Politics of Mexico	
PSCI 328	Politics of China	
PSCI 334	International Security	
PSCI 336	European Union	
PSCI 337	Model United Nations	
PSCI 381	State Formation	
SOCI 212S	Social Issues Southeast Asia	

CODE	TITLE	HOURS
SOCI 325	Social Stratification	
SOCI 355	Population and Society	
Total Hours		3

Course List

Minimum Required Grade: C-

Activities Requirement

Note: Students are required to retain documentation tracking participation/attendance of such activities, which will be signed by the MCLL chair.

CODE	TITLE	HOURS
Participation in eight (8) campus activities with an international focus (these activities are not for credit). Examples of such activities could include participating club events; attending campus lectures that have an international focus; volunteering for Foreign Language Day; or going to cultural events (art exhibit, theater performance) that have an international theme.		

Course List

Davidson Honors College

Timothy Nichols, Dean

The mission of the Davidson Honors College is to attract the best students from around our state and country to the University of Montana; to develop engaged citizens and professionals who excel in critical thinking, communication, collaboration, problem solving, ethical reasoning, and civic engagement; and to serve as a hub of intellectual, service, and social activity for students, staff, and faculty across the University of Montana campus. The mission of the Davidson Honors College is to attract the best students from around our state and country to the University of Montana; to develop engaged citizens and professionals who excel in critical thinking, communication, collaboration, problem solving, ethical reasoning, and civic engagement; and to serve as a hub of intellectual, service, and social activity for students, staff, and faculty across the University of Montana campus.

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 electives. These electives are open to students from all disciplines. The aim of these courses 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 experiences, including HONR 120 and HONR 121L and a senior Honors capstone project. Details are available in the Davidson Honors College office or on the DHC web site.

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.

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.

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 1260. 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* must be postmarked or submitted online by the first Friday in December. 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 1310, and ACT composite score of 30.

All Davidson Honors College applications for admission received by the first Friday in December 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: http://www.dhc.umt.edu

Franke Global Leadership Initiative < University of Montana

Franke Global Leadership Initiative

- Overview
- Programs

Jeanne Loftus, Director

T h e Franke Global Leadership Initiative is a certificate program that encourages undergraduate students to lead, innovate and think entrepreneurially in order to propose solutions to some of society s greatest challenges. Each year, a cohort of students from disciplines across campus is selected to participate in this 4-year, 12-credit Certificate in Global Leadership.

Students in the Franke Global Leadership Certificate begin by exploring new and enduring global challenges through small, interdisciplinary seminars and through a survey course that delves into specific challenges within a set of five overarching global themes. After gaining an understanding of global challenges, participants experience different styles of leadership and begin to practice and develop leadership styles of their own.

During the final two years of the certificate, the program hones in on a specific theme and challenge chosen by each student. The world becomes the classroom in year three as students undertake experiential learning in both domestic and international settings. By year four, students are ready to bring their individual experiences together through a culminating capstone project with interdisciplinary teams. Each team presents a problem and proposes an innovative solution formed from their out-of-classroom experiences and disciplinary knowledge.

Undergraduate Certificates

- Global Leadership Certificate

Global Leadership Certificate < University of Montana

Global Leadership Certificate

Post-Secondary Certificate - Global Leadership

Degree Specific Credits: 12

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Summary

CODE	TITLE	HOURS
Required Courses		6
Required Courses		6
Total Hours		12

Course List

Required Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
GBLD 110	Global Challenges and Leadership	1
GBLD 194	Seminar	3
GBLD 220	Models of Leadership	2
Total Hours		6

Course List

Minimum Required Grade: C-

Required Courses

Note:

- Junior year - Students must complete 3 upper-division credits of internship, research, study abroad or service learning connected to their global theme.
- Senior year - Students must complete 3 credits of GBLD 499 (2 in autumn, 1 in spring).

CODE	TITLE	HOURS
Complete all of the following courses:		
3 upper-division credits of internship, research, study abroad or service learning.		3
GBLD 499	GLI Capstone (Taken in 2 parts)	3
GLI Capstone Development (Sections 01-20) - 2 credits		
GLI Capstone Project (Sections 21-40) - 1 Credit		
Total Hours		6

Course List

Minimum Required Grade: C-

Global Public Health Minor < University of Montana

Global Public Health Minor

Minor - Global Public Health

College of Humanities & Sciences

Degree Specific Credits: 21

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

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.

Summary

CODE	TITLE	HOURS
Required Courses		6
Core Electives		9
Content Electives		6
Total Hours		21

Course List

Required Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
BIOM 227	Vectors and Parasites	3
PSCI 227	Global Health Issues	3
Total Hours		6

Course List

Minimum Required Grade: C-

Core Electives

Note: Students should select the Ethnobotany of Amerindians section of PHAR 391 and the Public Health Genetics section of PHAR 491.

CODE	TITLE	HOURS
Complete 9 credits from the following courses:		9
AHHS 430	Health Aspects of Aging	
ANTY 126	Anthropology and Global Health	
ANTY 349	Social Change	
ANTY 426	Culture, Health and Healing	
BIOM 250N	Microbiology for Hlth Sciences	
BIOM 427	General Parasitology	
BIOM 428	General Parasitology Lab	
CHTH 355	Theory Practicum Community Health Education	
CHTH 445	Program Planning in Community Health	
COMX 425	Communication in Health Organizations	
ECNS 310	Intro Health Economics	
GPHY 468	Community & Regional Analysis	
IDS 497	Methods	
PHAR 320	Am Ind Health Issues	
PHAR 391	Special Topics (Public Health Genetics)	
PHL 321E	Philosophy & Biomedical Ethics	
PSCI 431	Politics of Global Migration	
PSCI 463	Development Administration	
S W 465	Social Work Global Context	
SOCI 355	Population and Society	
THTR 385	Theatre for Social Justice	
Total Hours		9

Course List

Minimum Required Grade: C-

Content Electives

CODE	TITLE	HOURS
Complete 6 credits from the following courses:		6
ANTY 333	Culture and Population	
ANTY 391	Special Topics	
ANTY 402	Quan Ethnographic Field Methds	
ANTY 418	Evolution and Genetic Variation in Human Populations	

CODE	TITLE	HOURS
ANTY 422	Mind, Culture and Society	
ANTY 431	Ethnographic Field Methods	
ANTY 435	Drugs, Culture and Society	
BIOB 130N	Evolution and Society	
BIOH 112	Human Form and Function I	
BIOH 113	Human Form and Function II	
BIOH 462	Principles Medical Physiology	
BIOM 402	Medical Bacteriology& Mycology	
BIOM 435	Virology	
COMX 204X	International and Development Communication	
COMX 415	Intercultural Communication	
COMX 485	Communication and Health	
ECNS 217X	Issues in Economic Development	
GPHY 121S	Human Geography	
GPHY 434	Food and Famine	
HTH 430	Health and Mind/Body/Spirit	
NASX 303E	Ecological Perspectives in Native American Traditions	
NASX 304E	Native American Beliefs/Philos	
NUTR 221N	Basic Human Nutrition	
PSCI 324	Climate Policies: China & U.S.	
PSCI 326	Politics of Africa	
PSCI 348	US Multicultural Politics	
PSCI 448	Health Care Policy	
PSYX 362	Multicultural Psychology	
PUBH 595	Practicum	
S W 300	Hum Behav & Soc Environ	
S W 310	S W Policy & Services	
S W 323	Women & Soc Action Amer	
S W 410E	Social Work Ethics	
S W 455	Social Gerontology	
S W 475	Death, Dying and Grief	
SOCI 332	Sociology of the Family	

CODE	TITLE	HOURS
SOCI 443	Sociology of Poverty	
SOCI 471	Gender and Global Development	
WGSS 263S	Social and Political Perspectives on Gender and Sexuality	
Total Hours		6

Course List

Minimum Required Grade: C-

Graduate School

Scott Whittenburg - Vice President for Research and Creative Scholarship & Dean of The Graduate School

Graduate education explores and advances knowledge boundaries and re-defines the state-of-the-art in every discipline. A master's degree will improve a person's expertise in their given field while a doctoral degree will promote original research that advances the current knowledge in the field.

The mission of the Graduate School is to improve and advance graduate education at the University of Montana. Our graduate programs train the next generation of scholars and enable the generation of new knowledge that will contribute to the scientific, economic and cultural needs of the state, the nation and the global community in the 21st century. The Graduate School carries out its mission through student advocacy, promotion of diversity and inclusivity, promotion of research, and development of dynamic, synergistic paths for education.

The Graduate School administers admission to masters and doctoral graduate programs at the University of Montana. Questions about specific programs should be directed to the appropriate college or school. There are currently 83 different graduate programs at the University of Montana that provide curricula for Master's, Educational Specialist, and Doctoral degrees. A complete list of programs is found in the Graduate School webpage and on the Degree and Majors webpage. The Skaggs School of Pharmacy, the School of Physical Therapy and Rehabilitation Science, and the School of Law administer the Professional Doctorates in Pharmacy, Physical Therapy, and Juris Doctor, respectively.

Applicants complete an online application, providing the information required by the graduate program of interest. Official test scores are sent to the Graduate School, while transcripts are sent to the program. Many, but not all, graduate programs have a specific application deadline. Each program has an admissions committee that evaluates the application, and the committee's final decision is forwarded as a recommendation to the Graduate School. The applicant then receives an electronic decision letter from the Graduate School.

Please refer to the graduate school website for degree programs offered. For further questions, please call us at 406-243-2572 or via email at grad.school@umontana.edu.

Maureen and Mike Mansfield Center < University of Montana

Maureen and Mike Mansfield Center

Deena Mansour, Interim Executive 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.

Course Descriptions

Missoula College

Thomas Gallagher, Dean

MISSION

The mission of Missoula College is to create a comprehensive, accessible, student-centered learning environment that fosters individual growth, facilitates workforce development, and provides a foundation for advanced academic achievement.

Vision of Excellence

We envision a future where Missoula College is recognized as a model of excellence for two-year education in Montana, empowering students to succeed in higher education and continuing to serve the needs of the community and workforce. We elevate the awareness of two-year education as a result of our high retention, graduation and placement rates. Through this demonstration of excellence, more students will enroll in two-year colleges, more businesses and industries will partner with two-year schools, and the state will receive the benefits of a more educated citizenry/workforce.

The Missoula College offers programs and services on four campuses:

1. the River Campus at 1205 East Broadway,
2. the West Campus at 2795 37th Avenue,
3. the Mountain Campus at 32 Campus Drive, and
4. the Bitterroot Campus 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 River Campus. All business technology programs, applied computing and engineering technology programs, health professions programs, as well as a branch of the Mansfield Library, and a dining room are located on the River 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 (B.A.S.) degree is offered by the University of Montana - Missoula in collaboration with the Missoula College. The initial contact for information and degree planning for the B.A.S. degree is the Missoula College Academic Advising Center. This degree program is available for students who have completed an Associate of Applied Science degree from an accredited institution and who wish to continue toward completing a baccalaureate degree. For more information, see the Bachelor of Applied Science section of the catalog.

Associate of Applied Science and Certificate of Applied Science Programs

The Associate of Applied Science (A.A.S.) and Certificate of Applied Science (C.A.S.) 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 A.A.S. 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 accredited by Accreditation Commission for Education in Nursing (ACEN). The Pharmacy Technology Program is accredited by American Society of Health System Pharmacists/Accreditation Council for Pharmacy Education (ASHP/ACPE).

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 students may focus on specific areas of emphasis in order to satisfy the degree requirements. 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 A.A. is 2.0. At least 30 of the 60 required credits must be earned at UM, through either Missoula College or University of Montana-Missoula.

Credit Applicable Toward Associate of Arts and Baccalaureate Degrees

Students may count up to 15 technical course credits towards the A.A. and baccalaureate degrees (except the B.A.S.; see the B.A.S. section of the catalog for more information). UP to 20 technical course credits may count if the student has previously earned an A.A.S. degree. Refer to the section on Technical Courses and Credit Maximums in this catalog for additional information. Students should visit with their advisor for more information.

Academic Support Services

Services designed to increase the success of students enrolled at Missoula College are available at the College. Such services include the Academic Advising Center, tutoring and computer-based academic learning tools in the Academic Support Center, 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.

Applied Arts and Sciences Department < University of Montana

Applied Arts and Sciences Department

- Overview
- Programs

Kimberly Reiser, 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.

Undergraduate

- Bachelor of Applied Science
- Associate of Arts ("General A.A")
- Associate of Arts (A.A.) with a Concentration in Communication Studies
- Associate of Arts (A.A.) with a Concentration in Professional Communication

Associate of Arts (A.A.)

- Overview
- Requirements

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.

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.

Baccalaureate Tracks and Emphasis Areas within the Associate of Arts Degree

Although the AA degree does not include a major or minor courses of study, students may elect to choose coursework that is part of a specific area of interest. Baccalaureate tracks are specific plans of study designed to help students earn an AA degree while simultaneously working towards UM baccalaureate degree requirements. Missoula College has worked with individual UM Departments to forge agreements to ensure that students completing baccalaureate tracks will enter into the major with numerous major requirements already fulfilled.

Recognized baccaluareate tracks within the Associate of Arts degree include:

- Business
- Chemical and Addiction Studies (by pursuing this emphasis, students complete both a general Associate of Arts degree and the preparatory coursework required to become a licensed addictions counselor.)
- Communication Science and Disorders
- Early Childhood Education
- Elementary Education
- Environmental Studies
- Healthcare Informatics
- Health and Human Performance
- Health IT
- Parks, Tourism, and Recreation Management
- Police Science/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.)
- Psychology
- Sociology
- Women, Gender, and Sexuality Studies

Concentrations within the Associate of Arts Degree

Similar to pathways or areas of emphasis within the AA degree, concentrations are meant to help students focus on a specific area of interest. Unlike areas of emphasis, these concentrations are recorded on the student's transcript as a concentration of the AA degree itself. Recognized concentrations of the Associate of Arts degree include:

- Communication Studies
- Professional Communication

The goal of these concentrations is to provide students with an opportunity to receive an AA degree with a focus on an area that is of increasing demand to employers. In addition, these concentrations help prepare students for matriculation into a major program in Communication Studies. Students interested in pursuing the AA with one of the communication concentrations should contact Kimberly Reiser (Kim.Reiser@umontana.edu).

Courses

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

Degree Specific Credits: 60

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: The AA degree has three requirements:

1. completion of UM's lower-division General Education Requirements (GERs),
2. a minimum of 60 total earned credits, and
3. 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).

Summary

Course List		
CODE	**TITLE**	**HOURS**
Writing Skills		6
Introductory Writing Course		
Intermediate Writing Course		
Mathematics		3-4
Perspectives		21-27
Expressive Arts		
Historical & Cultural Studies		
Literary & Artistic Studies		
Social Sciences		
Ethical & Human Values		
Democracy and Citizenship		
Cultural and International Diversity		
Natural Sciences		
AA Degree Electives		13-27

Writing Skills

Rule: Complete the following subcategories. 6 total credits 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.

Introductory Writing Course

Note: Appropriate placement into WRIT 101/WRIT 201 required. Prerequisites may apply.

Course List		
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		
WRIT 101	College Writing I	3
or WRIT 201	College Writing II	

Minimum Required Grade: C-

Intermediate Writing Course

Course List		
CODE	**TITLE**	**HOURS**
Complete any course designated as an Intermediate Writing Course during semester it's taken.		3

Minimum Required Grade: C-

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.

Course List		
CODE	**TITLE**	**HOURS**
Complete any Mathematics course level 104 or higher (excluding M 111).		3-4

Minimum Required Grade: C-

Perspectives

Rule: A minimum of 3 credits towards each perspective category is required. 21-27 total credits 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.

Expressive Arts (A)

Course List		
CODE	**TITLE**	**HOURS**
Complete a minimum 3 credits in any course with the Expressive Arts (A) designation.		3

Minimum Required Grade: C-

Literary & Artistic Studies (L)

Course List		
CODE	**TITLE**	**HOURS**
Complete a minimum 3 credits in any course with the Literary & Artistic Studies (L) designation.		3

Minimum Required Grade: C-

Historical & Cultural Studies (H)

Course List		
CODE	**TITLE**	**HOURS**
Complete a minimum 3 credits in any course with the Historical & Cultural Studies (H) designation.		3

Minimum Required Grade: C-

Social Sciences (S)

Course List		
CODE	**TITLE**	**HOURS**
Complete a minimum 3 credits in any course with the Social Sciences (S) designation.		3

Minimum Required Grade: C-

Ethical & Human Values (E)

Course List		
CODE	**TITLE**	**HOURS**
Complete a minimum 3 credits in any course with the Ethical & Human Values (E) designation.		3

Minimum Required Grade: C-

Democracy and Citizenship (Y)

Course List		
CODE	**TITLE**	**HOURS**
Complete a minimum 3 credits in any course with the Democracy and Citizenship (Y) designation.		3

Minimum Required Grade: C-

Cultural and International Diversity (X)

Course List		
CODE	**TITLE**	**HOURS**
Complete a minimum 3 credits in any course with the Cultural and International Diversity (X) designation.		3

Minimum Required Grade: C-

Natural Sciences (N)

Course List		
CODE	**TITLE**	**HOURS**
Complete a minimum 6 credits in any course with the Natural Sciences (N) designation. At least one course must have a laboratory component.		6

Minimum Required Grade: C-

AA Degree Electives

Note: Number of elective credits required varies; student needs to ensure s/he earns at least 60 total credits for the AA degree. 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.)

Course List		
CODE	**TITLE**	**HOURS**
Complete elective credits to attain the 60 credits required for the General AA degree.		13-27

Minimum Required Grade: C-

Associate of Arts (A.A.) - Communication Studies < University of Montana

Associate of Arts (A.A.) - Communication Studies

Associate of Arts - General AA; Communication Studies Concentration

Missoula College

Degree Specific Credits: 60

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: The AA degree has three requirements:

1. completion of UM's lower-division General Education Requirements (GERs),
2. a minimum of 60 total earned credits, and
3. 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).

In addition, to receive to Associate of Arts with a concentration in Communication Studies, a student must complete the requirements specific to that degree.

Summary

CODE	TITLE	HOURS
Degree Specific Requirements		24-25
Organizational Communication or Rhetorical Theory		
Statistics		
Communication Elective		
Writing Skills		6
Introductory Writing Course		
Intermediate Writing Course		
Mathematics		3
Perspectives		21-27
Expressive Arts		
Literary & Artistic Studies		
Historical & Cultural Studies		
Social Sciences		
Ethical & Human Values		
Democracy and Citizenship		
Cultural and International Diversity		
Natural Sciences		
AA Degree Electives		13-27

Course List

Degree Specific Requirements for AA with a Concentration in Communication Studies

Note: Some courses required for the Associate of Arts with a concentration in Communication Studies satisfy multiple Perspectives or GER Categories; visit with your advisor for more information.

CODE	TITLE	HOURS
Complete all of the following courses:		
COMX 111A	Introduction to Public Speaking	3
COMX 115S	Introduction to Interpersonal Communications	3
COMX 140L	Introduction to Visual Rhetoric	3
M 115	Probability and Linear Mathematics	3
Total Hours		12

Course List

Minimum Required Grade: C-

Organizational Communication or Rhetorical Theory

CODE	TITLE	HOURS
Complete one of the following courses:		
COMX 220S	Introduction to Organizational Communication	3
or COMX 240H	Introduction to Rhetorical Theory	
Total Hours		3

Course List

Minimum Required Grade: C-

Statistics

Note: Completion of one of these courses satisfies the Symbolic Systems GER category.

CODE	TITLE	HOURS
Complete one of the following courses:		3-4
PSYX 222	Psychological Statistics	
SOCI 202	Social Statistics	
STAT 216	Introduction to Statistics	
Total Hours		3-4

Course List

Minimum Required Grade: C-

Communication Elective

CODE	TITLE	HOURS
Complete 6 credits in two directed elective courses. Directed electives must be approved by student's advisor.		6

Course List

Writing Skills

Rule: Complete the following subcategories. 6 total credits 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.

Introductory Writing Course

Note: Appropriate placement into WRIT 101/WRIT 201 required. Prerequisites may apply.

CODE	TITLE	HOURS
Complete one of the following courses:		
WRIT 101	College Writing I	3
or WRIT 201	College Writing II	

Course List

Minimum Required Grade: C-

Intermediate Writing Course

CODE	TITLE	HOURS
Complete any course designated as an Intermediate Writing Course during semester it's taken.		3

Course List

Minimum Required Grade: C-

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.

CODE	TITLE	HOURS
Complete any Mathematics course level 104 or higher (excluding M 111).		3-4

Course List

Minimum Required Grade: C-

Perspectives

Rule: A minimum of 3 credits towards each perspective category is required. 21-27 total credits 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.

Expressive Arts (A)

CODE	TITLE	HOURS
Complete a minimum 3 credits in any course with the Expressive Arts (A) designation.		3

Course List

Minimum Required Grade: C-

Literary & Artistic Studies (L)

CODE	TITLE	HOURS
Complete a minimum 3 credits in any course with the Literary & Artistic Studies (L) designation.		3

Course List

Minimum Required Grade: C-

Historical & Cultural Studies (H)

CODE	TITLE	HOURS
Complete a minimum 3 credits in any course with the Historical & Cultural Studies (H) designation.		3

Course List

Minimum Required Grade: C-

Social Sciences (S)

CODE	TITLE	HOURS
Complete a minimum 3 credits in any course with the Social Sciences (S) designation.		3

Course List

Minimum Required Grade: C-

Ethical & Human Values (E)

CODE	TITLE	HOURS
Complete a minimum 3 credits in any course with the Ethical & Human Values (E) designation.		3

Course List

Minimum Required Grade: C-

Democracy and Citizenship (Y)

CODE	TITLE	HOURS
Complete a minimum 3 credits in any course with the Democracy and Citizenship (Y) designation.		3

Course List

Minimum Required Grade: C-

Cultural and International Diversity (X)

CODE	TITLE	HOURS
Complete a minimum 3 credits in any course with the Cultural and International Diversity (X) designation.		3

Course List

Minimum Required Grade: C-

Natural Sciences (N)

CODE	TITLE	HOURS
Complete a minimum 6 credits in any course with the Natural Sciences (N) designation. At least one course must have a laboratory component.		6

Course List

Minimum Required Grade: C-

AA Degree Electives

Note: Number of elective credits required varies; student needs to ensure s/he earns at least 60 total credits for the AA degree. 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.)

CODE	TITLE	HOURS
Complete elective credits to attain the 60 credits required for the General AA degree.		13-27

Course List

Minimum Required Grade: C-

Associate of Arts (A.A.) - Professional Communication

Associate of Arts - General AA; Professional Communication Concentration

Missoula College

Degree Specific Credits: 60

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: The AA degree has three requirements:

1. completion of UM's lower-division General Education Requirements (GERs),
2. a minimum of 60 total earned credits, and
3. 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).

In addition, to receive to Associate of Arts with a concentration in Professional Communication, a student must complete the requirements specific to that degree.

Summary

Course List		
CODE	**TITLE**	**HOURS**
Degree Specific Requirements		27-28
Statistics		
Communication Elective		
Writing Skills		6
Introductory Writing Course		
Intermediate Writing Course		
Mathematics		3
Perspectives		21-27
Expressive Arts		
Historical & Cultural Studies		
Literary & Artistic Studies		
Social Sciences		
Ethical & Human Values		
Democracy and Citizenship		
Cultural and International Diversity		
Natural Sciences		
AA Degree Electives		13-27

Degree Specific Requirements for AA with a Concentration in Professional Communication

Note: Some courses required for the Associate of Arts with a concentration in Professional Communication satisfy multiple Perspectives or GER Categories; visit with your advisor for more information.

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
COMX 111A	Introduction to Public Speaking	3
COMX 115S	Introduction to Interpersonal Communications	3
COMX 140L	Introduction to Visual Rhetoric	3
COMX 220S	Introduction to Organizational Communication	3
M 115	Probability and Linear Mathematics	3
WRIT 121	Intro to Technical Writing	3
Total Hours		18

Minimum Required Grade: C-

Statistics

Course List		
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		3-4
PSYX 222	Psychological Statistics	
SOCI 202	Social Statistics	
STAT 216	Introduction to Statistics	
Total Hours		3-4

Minimum Required Grade: C-

Communication Elective

		Course List
CODE	**TITLE**	**HOURS**
Complete 2 credits of directed elective courses. Directed electives must be approved by student's advisor.		3

Writing Skills

Rule: Complete the following subcategories. 6 total credits 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.

Introductory Writing Course

Note: Appropriate placement into WRIT 101/WRIT 201 required. Prerequisites may apply.

Course List		
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		
WRIT 101	College Writing I	3
or WRIT 201	College Writing II	

Minimum Required Grade: C-

Intermediate Writing Course

Course List		
CODE	**TITLE**	**HOURS**
Complete any course designated as an Intermediate Writing Course during semester it's taken.		3

Minimum Required Grade: C-

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.

Course List		
CODE	**TITLE**	**HOURS**
Complete any Mathematics course level 104 or higher (excluding M 111).		3-4

Minimum Required Grade: C-

Perspectives

Rule: A minimum of 3 credits towards each perspective category is required. 21-27 total credits 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.

Expressive Arts (A)

Course List		
CODE	**TITLE**	**HOURS**
Complete a minimum 3 credits in any course with the Expressive Arts (A) designation.		3

Minimum Required Grade: C-

Literary & Artistic Studies (L)

Course List		
CODE	**TITLE**	**HOURS**
Complete a minimum 3 credits in any course with the Literary & Artistic Studies (L) designation.		3

Minimum Required Grade: C-

Historical & Cultural Studies (H)

Course List		
CODE	**TITLE**	**HOURS**
Complete a minimum 3 credits in any course with the Historical & Cultural Studies (H) designation.		3

Minimum Required Grade: C-

Social Sciences (S)

Course List		
CODE	**TITLE**	**HOURS**
Complete a minimum 3 credits in any course with the Social Sciences (S) designation.		3

Minimum Required Grade: C-

Ethical & Human Values (E)

Course List		
CODE	**TITLE**	**HOURS**
Complete a minimum 3 credits in any course with the Ethical & Human Values (E) designation.		3

Minimum Required Grade: C-

Democracy and Citizenship (Y)

Course List		
CODE	**TITLE**	**HOURS**
Complete a minimum 3 credits in any course with the Democracy and Citizenship (Y) designation.		3

Minimum Required Grade: C-

Cultural and International Diversity (X)

Course List		
CODE	**TITLE**	**HOURS**
Complete a minimum 3 credits in any course with the Cultural and International Diversity (X) designation.		3

Minimum Required Grade: C-

Natural Sciences (N)

Course List		
CODE	**TITLE**	**HOURS**
Complete a minimum 6 credits in any course with the Natural Sciences (N) designation. At least one course must have a laboratory component.		6

Minimum Required Grade: C-

AA Degree Electives

Note: Number of elective credits required varies; student needs to ensure s/he earns at least 60 total credits for the AA degree. 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.)

Course List		
CODE	**TITLE**	**HOURS**
Complete elective credits to attain the 60 credits required for the General AA degree.		13-27

Minimum Required Grade: C-

Addiction Studies C.T.S.

Certificate of Technical Studies - Addiction Studies

Missoula College

Degree Specific Credits: 28

Required Cumulative GPA: 2.0

Catalog Year: 2019-20

Notes:

- The Certificate in Addiction Studies is a set of courses that meet the required 330 hours of addiction education with a requirement of a completed accompanying degree (Associate/Baccalaureate/ or Advanced Degree in specific disciplines, i.e. psychology, addictions, sociology, social work or similar emphasis areas.
- Students may only apply for state licensing exam after completing 1000 hours of supervised internships following degree completion.
- The Certificate of Addiction Studies is designed to benefit all qualifying degrees as defined by the MCA 37-35-202.

Summary

Addiction Studies Required Courses	28
Total Hours	28

Addiction Studies Required Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
CAS 140X	Addictions and Diversity	3
CAS 201	Theories of Counseling	3
CAS 231	Pharmacology & Addiction	3
CAS 242	Fundamentals of Substance Abuse and Addiction	3
CAS 243	Substance Abuse Counseling I	3
CAS 248	Substance Abuse Counseling II	3
CAS 252	Gambling and Gaming Disorders in Addiction Counseling	2
CAS 254	Co-Occuring Disorders Assessment/Treatment	2
CAS 260	Addiction Assessment/Documentation/Treatment Planning	3
CAS 261	Advanced Assessment/Treatment Planning	3
Total Hours		28

Minimum Required Grade: C-

Business Technology Department < University of Montana

Business Technology Department

- Overview
- Programs

Michelle Boller, 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 students 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 optional concentration in Computer Support; Administrative Management with an optional concentration in Social Media Management; Food Service Management; Hospitality Management; Medical Information Technology with concentrations in Health Information Coding and Medical Administrative Assisting; Paralegal Studies; and Management with concentrations in Entrepreneurship and Sales and Marketing. Certificate of Applied Science programs include Business Media Design, Culinary Arts, Customer Relations, Hospitality Management, Medical Reception, and Sales and Marketing. Certificate of Technical Skills programs include Medical Claims Service Specialist.

Undergraduate Associates of Applied Science and Certificates

Accounting Technology:

- Accounting Fundamentals C.A.S.
- Accounting Technology A.A.S.
- Accounting Technology A.A.S., Computer Support Concentration

Administrative Management:

- Administrative Management A.A.S.
- Administrative Management A.A.S., Social Media Management Concentration
- Customer Relations C.A.S.
- Business Media Design C.A.S.

Applied Computing and Engineering:

- Information Technology A.A.S. - Network Administration and Security
- Information Technology A.A.S. - Programming and App Development
- Computer Aided Design C.A.S.
- Computer Support C.A.S.
- Cybersecurity C.T.S.
- Energy Auditor C.T.S.
- Recycling Technology C.T.S.
- Health Information Technology Certificate

Big Sky Culinary Institute:

- Food Service Management A.A.S.
- Hospitality Management A.A.S.
- Culinary Arts C.A.S.
- Hospitality Management C.A.S.

Management:

- Management A.A.S., Entrepreneurship Concentration
- Management A.A.S., Sales and Marketing Concentration
- Sales and Marketing C.A.S.

Medical Information Technology:

- Medical Information Technology A.A.S., Health Information Coding Concentration

- Medical Information Technology A.A.S., Medical Administrative Assisting Concentration
- Medical Claims Specialist C.T.S.
- Medical Reception C.A.S.

Paralegal Studies:

- Paralegal Studies A.A.S.

Accounting Fundamentals C.A.S. < University of Montana

Accounting Fundamentals C.A.S.

Certificate of Applied Science - Accounting Fundamentals

Missoula College

Degree Specific Credits: 32

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: See Program Director for advising regarding scope and sequence, course prerequisites, and math and writing placement assessments.

Summary

CODE	TITLE	HOURS
Accounting Fundamentals Required Courses		32
Total Hours		32

Course List

Accounting Fundamentals Required Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
ACTG 101	Accounting Procedures I	4
ACTG 102	Accounting Procedures II	4
ACTG 180	Payroll Accounting	3
AMGT 240	Admin Support for the Office	3
BGEN 235	Business Law	3
CAPP 120	Introduction to Computers	3
COMX 115S	Introduction to Interpersonal Communications	3
CSCI 172	Intro to Computer Modeling	3
or CAPP 156	MS Excel	
M 115	Probability and Linear Mathematics	3
or M 105	Contemporary Mathematics	
WRIT 121	Intro to Technical Writing	3
Total Hours		32

Course List

Minimum Required Grade: C-

Accounting Technology A.A.S. < University of Montana

Accounting Technology A.A.S.

- Overview
- Requirements

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

Degree Specific Credits: 63

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: See Program Director for scope and sequence advising. Please refer to online schedule for online course availability.

Summary

CODE	TITLE	HOURS
Accounting Technology Required Courses		63
Total Hours		63

Course List

Accounting Technology Required Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
ACTG 101	Accounting Procedures I	4
ACTG 102	Accounting Procedures II	4
ACTG 180	Payroll Accounting	3
ACTG 202	Principles of Managerial Accounting	3
ACTG 211	Income Tax Fundamentals	4
ACTG 215	Fnd of Govt & Not Profit Acct	3
ACTG 250	Accounting Capstone	4
ACTG 298	Internship	2
AMGT 240	Admin Support for the Office	3
BGEN 105S	Introduction to Business	3
BGEN 160S	Issues in Sustainability	3
BGEN 235	Business Law	3
BFIN 205S	Personal Finance	3
CAPP 120	Introduction to Computers	3
CAPP 156	MS Excel	3
or CSCI 172	Intro to Computer Modeling	
COMX 111A	Introduction to Public Speaking	3
COMX 115S	Introduction to Interpersonal Communications	3
M 115	Probability and Linear Mathematics	3
WRIT 101	College Writing I	3
WRIT 121	Intro to Technical Writing	3
Total Hours		63

Course List

Minimum Required Grade: C-

Accounting Technology A.A.S. - Computer Support < University of Montana

Accounting Technology A.A.S. - Computer Support

- Overview
- Requirements

Lisa Swallow, Director

In addition to accounting technician training, students selecting this concentration will be prepared to install, configure, manage and maintain LAN and/or WAN systems; install, configure, manage and maintain computer hardware and software; train and support system users; administer system security; and upgrade, update and expand network systems.

Associate of Applied Science - Accounting Technology; Computer Support Concentration

Missoula College

Degree Specific Credits: 61

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: See Program Director for scope and sequence advising. Please refer to online schedule for online course availability.

Summary

CODE	TITLE	HOURS
Accounting Technology Required Courses		58
Writing Requirement		3
Total Hours		61

Course List

Accounting Technology Required Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
ACTG 101	Accounting Procedures I	4
ACTG 102	Accounting Procedures II	4
ACTG 180	Payroll Accounting	3
ACTG 202	Principles of Managerial Accounting	3
ACTG 211	Income Tax Fundamentals	4
ACTG 250	Accounting Capstone	4
ACTG 298	Internship	2
BGEN 105S	Introduction to Business	3
CAPP 156	MS Excel	3
COMX 111A	Introduction to Public Speaking	3
CSCI 105	Computer Fluency	3
CSCI 172	Intro to Computer Modeling	3
CSCI 215E	Social & Ethical Issues in CS	3
ITS 150	CCNA 1: Exploration	3
ITS 165	OS Commands and Scripts	3
ITS 210	Network OS - Desktop	3
ITS 280	Computer Repair & Maint.	3
ITS 289	Professional Certification	1
M 115	Probability and Linear Mathematics	3
Total Hours		58

Course List

Minimum Required Grade: C-

Writing Requirement

Note: See Program Director for prerequisites, placement and advising.

CODE	TITLE	HOURS
Complete one of the following courses:		
WRIT 101	College Writing I	3
or WRIT 121	Intro to Technical Writing	
Total Hours		3

Course List

Minimum Required Grade: C-

Administrative Management A.A.S. < University of Montana

Administrative Management A.A.S.

- Overview
- Requirements

Cheryl Galipeau, Director

Administrative professionals enjoy variety, project management, meaningful work, task autonomy, and leadership responsibility. The curriculum advances career proficiencies in Customer Relations (first year of program) with second-year coursework geared toward meeting the administrative needs of organizations by learning to:

- Craft effective online and print publications using strong visual composition techniques
- Coordinate and manage projects, resources and technology needs
- Assume leadership, organizational and communication roles

Graduates are ready to actively contribute and become vital members of an executive team. Emphasis in computers, project management, and communications across industries. You also have the opportunity to earn industry standard Microsoft Office Specialist certifications. Graduates enjoy opportunities for employment in a wide variety of business settings. Academically prepared students entering autumn semester may complete the program in four semesters as outlined below. Students entering spring should meet with an advisor prior to selecting courses.

Student Outcomes:

- Formulate service policies for excellent customer service management
- Apply service-level decisions to develop staff, enhance customer loyalty, and deal with challenges and conflicts while serving both internal and external customers
- Demonstrate the workplace skills of effective communication (oral, written, nonverbal), problem-solving, managing interpersonal relationships, and collaborating with teams, thinking critically, and leadership
- Ethically use research and the tools of technology to create and organize business documents efficiently, accurately, and artfully designed
- Design and develop effective online solutions incorporating search engine strategies, attractive user-centered and accessible design for multiple platforms, mobility, and devices relevant to organizational goals and targets
- Plan for career development by creating standard employment documents and honing personal presentation skills
- Understand, appreciate, and recognize opportunities of diverse populations and cultures

Related Job Titles:

- Administrative Assistant
- Administrative Coordinator
- Administrative Manager
- Administrative Specialist
- Client Relations Manager
- Executive Assistant
- Office Assistant
- Virtual Assistant

Associate of Applied Science - Administrative Management

Missoula College

Degree Specific Credits: 62

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: See Program Director for advising regarding scope and sequence, course prerequisites, and math and writing placement assessments. Completion of the requirements for a Certificate of Applied Science in Customer Relations is embedded within the completion of the Administrative Management courses.

Summary

CODE	TITLE	HOURS
Administrative Management Required Courses		52
Writing Requirements		3
Math Requirements		3
Accounting Requirements		4
Total Hours		62

Course List

Administrative Management Required Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
AMGT 240	Admin Support for the Office	3
AMGT 298	Adm Mgmt Internship	2
BGEN 105S	Introduction to Business	3
BGEN 235	Business Law	3
BMGT 212	Critical Analysis for Business	3
BMGT 216	Psych of Mgmt & Supervision	4
BMGT 245	Customer Service Management	4
CAPP 120	Introduction to Computers	3
CAPP 154	MS Word	3
CAPP 254	Advanced MS Word	3
COMX 111A	Introduction to Public Speaking	3
COMX 115S	Introduction to Interpersonal Communications	3
COMX 250	Intro to Public Relations	3
CSCI 172	Intro to Computer Modeling	3
or CAPP 156	MS Excel	
ITS 221	Project Management	3
MART 214	Digital Publishing & Design	3
MART 232	Interactive Web II	3
Total Hours		52

Course List

Minimum Required Grade: C-

Writing Requirements

Note: See Program Director for prerequisites, placement and advising.

CODE	TITLE	HOURS
Complete one of the following courses:		
WRIT 101	College Writing I	3
or WRIT 121	Intro to Technical Writing	
Total Hours		3

Course List

Minimum Required Grade: C-

Math Requirements

Note: See Program Director for prerequisites, placement and advising.

CODE	TITLE	HOURS
Complete one of the following courses:		
M 105	Contemporary Mathematics	3
or M 115	Probability and Linear Mathematics	
Total Hours		3

Course List

Required Grade: C-

Accounting Requirements

CODE	TITLE	HOURS
Complete one of the following courses:		
ACTG 101	Accounting Procedures I	4
Total Hours		4

Course List

Minimum Required Grade: C-

Administrative Management A.A.S. - Social Media Management

- Overview
- Requirements

Cheryl Galipeau, Director

If you are outgoing, energetic, computer savvy and communicate well, you can excel as a social media professional. Social media is an exciting and growing communication medium used by a wide variety of industries. The program prepares you to explore and select platforms, design strategies to attract target audiences, build relationships and promote a presence using new and traditional marketing methods. You will learn to develop strategies in:

- Storytelling, creative imagery, and video
- Using real-time analytics to understand customer patterns and employ search engine optimization
- Creating effective layout, design and content for print publications

Graduates will apply real-world techniques in social engagement to improve the customer experiences, promote brand profiles, produce and publish relevant, engaging and sharable content. This option prepares you for a career in product and service promotion, marketing and communications in a variety of organizational settings.

Academically prepared students entering Autumn semester may complete the program in four semesters. Students entering spring should meet with an advisor prior to selecting courses.

Student Outcomes:

Upon completion of the program, students will:

- Demonstrate the workplace skills of effective communication (oral, written, nonverbal), problem-solving, managing interpersonal relationships and collaborating with teams, promoting internal and external customer loyalty, dealing with challenges and conflict, thinking critically, and leadership
- Ethically use research and the tools of technology to create and organize business documents efficiently, accurately, and artfully designed
- Design and develop effective online solutions incorporating search engine and social media optimization strategies, attractive user-centered and accessible design for multiple platforms, mobility, and devices relevant to organizational goals and targets
- Plan for career development by creating standard employment documents and honing personal presentation skills
- Understand, appreciate, and recognize opportunities of diverse populations and cultures
- Promote a positive organizational presence through marketing, advertising and relationship building for online and traditional organizational communications and publications
- Create quality digital images using fundamentals of photography, videography and digital editing
- Analyze, monitor and contrast social media categories and sharing platforms appropriate for consumers who actively participate in today's marketing processes
- Identify social objects, paid media, earned media, owned media and curated media
- Create, deliver and calendar engaging and shareable social media content
- Explore advertising media, budget plans, ad campaign designs, and in-house promotion designs, for radio, television, online and print
- Demonstrate ethical behavior by following social media policies, copyright guidelines, and transparency and disclosure practices
- Be enthusiastic, creative and realistic

Related Job Titles:

- Social Media Editor
- Product Promotion
- Marketing Communications Associate
- Social Media Coordinator
- Social Media Community Manager
- Digital Marketing/Social Media Specialist

Further Educational Opportunities:

All credits earned in the program fulfill partial requirements toward a Bachelor of Applied Science (B.A.S.) degree through the University of Montana OR fulfill partial requirements toward general education core in Communication Studies, Media Arts, or Journalism.

Associate of Applied Science - Administrative Management; Social Media Management Concentration

Missoula College

Degree Specific Credits: 66

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: See Program Director for advising regarding scope and sequence, course prerequisites, and math and writing placement assessments.

Summary

Course List		
CODE	**TITLE**	**HOURS**
Administrative Management - Social Media Management Concentration Required Courses		66
Total Hours		66

Administrative Management - Social Media Management Concentration Required Courses

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
AMGT 298	Adm Mgmt Internship	2
BGEN 105S	Introduction to Business	3
BGEN 235	Business Law	3
BMGT 245	Customer Service Management	4
BMKT 112	Applied Sales	3
BMKT 225	Marketing	3
BMKT 240	Advertising	3
BMKT 265	Social Media Strat & Mgmt	3
CAPP 120	Introduction to Computers	3
COMX 115S	Introduction to Interpersonal Communications	3
COMX 140L	Introduction to Visual Rhetoric	3
COMX 250	Intro to Public Relations	3
JRNL 100H	Media History and Literacy	3
or MART 101L	Intro to Media Arts	
JRNL 170	Elements of News Writing	3
JRNL 257	Beginning Visual Journalism	3
or MART 112A	Introduction to Film Editing	
M 115	Probability and Linear Mathematics	3
MART 102	Digital Technology in the Arts	3
MART 111A	Intro to Photoshop	3
MART 214	Digital Publishing & Design	3
MART 232	Interactive Web II	3
WRIT 101	College Writing I	3
WRIT 121	Intro to Technical Writing	3
or JRNL 270	Reporting	
Total Hours		66

Minimum Required Grade: C-

Business Media Design C.A.S. < University of Montana

Business Media Design C.A.S.

- Overview
- Requirements

Cheryl Galipeau, Director

People respond to emotion, engagement, and strong design. Combine your unique talents in digital media, expressive arts, visual communications, and business toward a career in media design for businesses, education or nonprofit organizations. You will learn:

- Media history and business foundations
- Work extensively in Adobe Creative Suite
- Practice effective visual composition and messaging
- Create interesting imagery and tell compelling stories

Projects require story development, original and edited still photographs, and original and edited audio and visual work in both still and time-based mediums. Graduates are prepared for immediate skill application. Successful completion of the C.A.S. meets prerequisites required for entry into the undergraduate programs for UM s Media Arts.

Student Outcomes:

- Gain foundational knowledge in digital and information technologies, the nature of business enterprise, media history, typography, visual symbols, art, and artistic aesthetics and expression
- Create, edit, and design audio/visual work in both the still image and time based mediums that focus on artistic expression and its relationship to digital technology
- Create business documents and publications using common business applications while following ethical, research, and industry standard guiding principles and best practices
- Assemble web assets needed to construct a complete website using current W3C web html document type standards, Search Engine Optimization strategies, and best web practices for file and domain management, container layout, navigation, and attractive web arrangement using principles and elements of design in an accessible web format
- Plan, create, and organize artistically pleasing and effective print layouts based on the intended audience, organizational goals, and sound design through typography and imagery
- Use photo editing software to create, edit and customize digital images in appropriate image size, resolution, and file type for the intended publication medium

Certificate of Applied Science - Business Media Design

Missoula College

Degree Specific Credits: 33

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: See Program Director for advising regarding scope and sequence, course prerequisites, and math and writing placement assessments.

Summary

CODE	TITLE	HOURS
Business Media Design Required Courses		30
Computer Science Requirement		3
Total Hours		33

Course List

Business Media Design Required Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
BGEN 105S	Introduction to Business	3
COMX 115S	Introduction to Interpersonal Communications	3
M 115	Probability and Linear Mathematics	3
MART 101L	Intro to Media Arts	3
or JRNL 100H	Media History and Literacy	
MART 102	Digital Technology in the Arts	3
MART 111A	Intro to Photoshop	3
MART 112A	Introduction to Film Editing	3
or JRNL 257	Beginning Visual Journalism	
MART 214	Digital Publishing & Design	3
MART 232	Interactive Web II	3
WRIT 101	College Writing I	3
Total Hours		30

Course List

Minimum Required Grade: C-

Computer Science Requirement

CODE	TITLE	HOURS
Complete one of the following courses:		
CAPP 120	Introduction to Computers	3
or CSCI 105	Computer Fluency	
Total Hours		3

Course List

Minimum Required Grade: C-

Computer Aided Design C.A.S. < University of Montana

Computer Aided Design C.A.S.

- Overview
- Requirements

Steve Shen, Interim Program Director

The Computer Aided Design (CAD) program offers graduates a pathway into professional careers as technicians in civil, mechanical, and architectural drafting. Other career opportunities exist in geographic information systems, mapping, surveying, and technical design. This one-year program prepares students in mathematics, business, and writing, as well as the following skills:

- graphic communications;
- computer-aided design and modeling systems;
- geographic information systems; and
- surveying.

Graduates emerge with an understanding of how to use computer aided design software to solve real-world graphic communications problems in a team-oriented environment.

Certificate of Applied Science - Computer Aided Design

Missoula College

Degree Specific Credits: 34

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Summary

CODE	TITLE	HOURS
Computer Aided Design Core Certificate Courses		34
Total Hours		34

Course List

Computer Aided Design Core Certificate Courses

Note: WRIT 121 may be substituted for WRIT 101 at the discretion of the program advisor based on future career and educational goals.

CODE	TITLE	HOURS
Complete all of the following courses:		
BGEN 105S	Introduction to Business	3
CSCI 105	Computer Fluency	3
CSCI 172	Intro to Computer Modeling	3
DDSN 113A	Technical Drafting	3
DDSN 114	Introduction to CAD	3
DDSN 116	3D CAD	3
DDSN 244	GIS Mapping	3
DDSN 245	Civil Drafting	4
M 121	College Algebra	3
SRVY 230	Intro to Srvyg for Engineers	3
WRIT 101	College Writing I	3
or WRIT 121	Intro to Technical Writing	
Total Hours		34

Course List

Minimum Required Grade: C-

Computer Support C.A.S. < University of Montana

Computer Support C.A.S.

- Overview
- Requirements

Victor Valgenti, Program Director

Computer Support is a 31-credit certificate program that prepares students for entry-level positions in the computing field. Required coursework includes programming, operating systems, networking, PC hardware, data modeling, and web technologies. Graduates pursue careers as help desk technicians, computer repair professionals, and computer support specialists. All students have the opportunity to complete the CompTIA A+ Computer Support Specialist industry certification. Coursework for the certificate program also leads to the A.A.S. degree in Information Technology.

Certificate of Applied Science - Computer Support

Missoula College

Degree Specific Credits: 31-32

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Summary

CODE	TITLE	HOURS
Computer Support Core Courses		28
Mathematics		3-4
Total Hours		31-32

Course List

Computer Support Core Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
BGEN 105S	Introduction to Business	3
CSCI 105	Computer Fluency	3
CSCI 135	Fund of Computer Science I	3
CSCI 172	Intro to Computer Modeling	3
ITS 150	CCNA 1: Exploration	3
ITS 165	OS Commands and Scripts	3
ITS 210	Network OS - Desktop	3
ITS 280	Computer Repair & Maint.	3
ITS 289	Professional Certification	1
WRIT 101	College Writing I	3
Total Hours		28

Course List

Minimum Required Grade: C-

Mathematics

CODE	TITLE	HOURS
Complete one of the following courses or any Mathematics course having one of these as a prerequisite:		3-4
M 115	Probability and Linear Mathematics	
M 121	College Algebra	
M 151	Precalculus	
Total Hours		3-4

Course List

Minimum Required Grade: C-

Culinary Arts C.A.S.

- Overview
- Requirements

Aimee Elliot, 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

Degree Specific Credits: 44

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: See Program Director for scope and sequence advising. Please refer to online schedule for online course availability.

Summary

Course List		
CODE	**TITLE**	**HOURS**
Culinary Arts Required Courses		44
Total Hours		44

Culinary Arts Required Courses

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
CAPP 120	Introduction to Computers	3
COMX 115S	Introduction to Interpersonal Communications	3
CULA 101	Introduction to Food Service	5
CULA 105	Food Service Sanitation	2
CULA 156	Dining Room Procedures	3
CULA 157	Pantry & Garde Manger	3
CULA 158	Short Order Cookery	4
CULA 160	Soups, Stocks, & Sauces	3
CULA 161	Meats & Vegetables	3
CULA 165	Baking & Pastry	3
CULA 210	Nutritional Cooking	3
M 105	Contemporary Mathematics	3
PSYX 100S	Intro to Psychology	3
WRIT 121	Intro to Technical Writing	3
or WRIT 101	College Writing I	
Total Hours		44

Minimum Required Grade: C-

Customer Relations C.A.S. < University of Montana

Customer Relations C.A.S.

- Overview
- Requirements

Cheryl Galipeau, Director

The Customer Relations Certificate prepares students to give customers what they expect, and then give them more! Increase your competitive advantage by creating a service culture, building and maintaining relationships, and developing customer service management systems.

Core topics include:

- Communication verbal/nonverbal , navigate challenges, effective conflict resolution, and listening skills
- Manage interpersonal relationships and build teams
- Public relations in organizations, reputation management and trust, and effective internal and external customer relationships.

> Learn to turn common problems into service opportunities! Emphasis in business, computers, communications, and exceptional service skills, add to your value as a customer relations professional. Customer Relations can be earned independently, or combined with second-year curriculum toward an Associate of Applied Science degree in Administrative Management.

This certificate is offered fully online. Note: Second year A.A.S. curriculum is not available fully online. Graduates are prepared for work as customer service representatives and managers in a variety of industries.

Student Outcomes:

Upon completion of the program, students will:

- Formulate service policies for excellent customer service management
- Apply service-level decisions to develop staff, enhance customer loyalty, and deal with challenges and conflicts while serving both internal and external customers
- Demonstrate the workplace skills of effective communication (oral, written, nonverbal), problem-solving, managing interpersonal relationships and collaborating with teams, thinking critically, and leadership
- Ethically use research and the tools of technology to create and organize business documents efficiently, accurately, and artfully designed
- Understand, appreciate, and recognize opportunities of diverse populations and cultures

Related Job Titles:

- Customer Service Representative
- Customer Care
- Call Centers
- Client Relations
- Client Services
- Guest Services
- Information Clerk
- Receptionist

Certificate of Applied Science - Customer Relations

Missoula College

Degree Specific Credits: 31

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: The Certificate of Applied Science in Customer Relations is available fully online. See Program Director for advising regarding scope and sequence, course prerequisites, and math and writing placement assessments.

Summary

CODE	TITLE	HOURS
Customer Relations Required Courses		22
Math Requirement		3
Writing Requirement		3
Computer Science Requirement		3
Total Hours		31

Course List

Customer Relations Required Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
BGEN 105S	Introduction to Business	3
BGEN 235	Business Law	3
BMGT 245	Customer Service Management	4
CAPP 120	Introduction to Computers	3
CAPP 154	MS Word	3
COMX 115S	Introduction to Interpersonal Communications	3
COMX 250	Intro to Public Relations	3
Total Hours		22

Course List

Minimum Required Grade: C-

Math Requirement

Note: See Program Director for prerequisites, placement and advising.

CODE	TITLE	HOURS
Complete one of the following courses:		
M 105	Contemporary Mathematics	3
or M 115	Probability and Linear Mathematics	
Total Hours		3

Course List

Minimum Required Grade: C-

Writing Requirement

Note: See Program Director for prerequisites, placement and advising.

CODE	TITLE	HOURS
Complete one of the following courses:		
WRIT 101	College Writing I	3
or WRIT 121	Intro to Technical Writing	
Total Hours		3

Course List

Minimum Required Grade: C-

Computer Science Requirement

Note: See Program Director for prerequisites, placement and advising.

CODE	TITLE	HOURS
Complete one of the following courses:		
CAPP 156	MS Excel	3
or CSCI 172	Intro to Computer Modeling	
Total Hours		3

Course List

Minimum Required Grade: C-

Cybersecurity C.T.S. < University of Montana

Cybersecurity C.T.S.

- Overview
- Requirements

The Certificate of Technical Studies in Cybersecurity is meant to provide individuals with technical education in information assurance. The curriculum is based upon the Core Knowledge Units developed by the National Security Agency (NSA) and the Department of Homeland Security (DHS). Students will gain skills in basic data analysis; programming; networking concepts; IT systems components; system administration; fundamental security design principles; cyber-threats and cyber-defense; cryptography; and policy, legal, ethics and compliance.

This certificate is a subset of courses leading to the Associate of Applied Science in Information Technology's concentration in Network Administration & Security and also to a BS in Management Information Systems.

The NSA and DHS have designated Missoula College as a National Center of Academic Excellence in Cyber-Defense Two-Year Education (CAE2Y). Those students completing the list of courses: CSCI 105, CSCI 172, CSCI 215E, ITS 150, ITS 214, ITS 222 will receive special recognition indicating completion of an NSA and DHS approved Cybersecurity CAE program of study.

Certificate of Technical Studies - Cybersecurity

Missoula College

Degree Specific Credits: 18

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: All students are required to take at least one course at Missoula College from the following list: CSCI 215E, ITS 150, or ITS 222.

Summary

CODE	TITLE	HOURS
Programming		3
Data Analysis		3
Policy, Legal, Ethics and Compliance		3
Networking & IT Systems Components		3
System Administration		3
Security Design Principles, Cyber Threats/Defense, and Cryptography		3
Total Hours		18

Course List

Programming

Note: Only Mountain Campus students are eligible to register for BMIS 365.

CODE	TITLE	HOURS
Complete one of the following courses:		3
CSCI 105	Computer Fluency	
CSCI 135	Fund of Computer Science I	
BMIS 365	Business App Development	
Total Hours		3

Course List

Minimum Required Grade: C-

Data Analysis

CODE	TITLE	HOURS
Complete the following course:		
CSCI 172	Intro to Computer Modeling	3
Total Hours		3

Course List

Minimum Required Grade: C-

Policy, Legal, Ethics and Compliance

Note: Only Mountain Campus students are eligible to register for ACTG 321.

CODE	TITLE	HOURS
Complete one of the following courses:		3
CSCI 215E	Social & Ethical Issues in CS	
ACTG 321	Acct Information Systems I	
Total Hours		3

Course List

Minimum Required Grade: C-

Networking & IT Systems Components

CODE	TITLE	HOURS
Complete the following course:		
ITS 150	CCNA 1: Exploration	3
Total Hours		3

Course List

Minimum Required Grade: C-

System Administration

Note: Only Mountain Campus students are eligible to register for BMIS 471.

CODE	TITLE	HOURS
Complete one of the following courses:		3
ITS 210	Network OS - Desktop	
ITS 214	Network OS - Infrastructure	
BMIS 471	Fund of Network & Security Management	
Total Hours		3

Course List

Minimum Required Grade: C-

Security Design Principles, Cyber Threats/Defense, and Cryptography

Note: Only Mountain Campus students are eligible to register for BMIS 472.

CODE	TITLE	HOURS
Complete one of the following courses:		3
ITS 222	Enterprise Security	
BMIS 472	Advanced Network & Security Management	
Total Hours		3

Course List

Minimum Required Grade: C-

Energy Auditor C.T.S. < University of Montana

Energy Auditor C.T.S.

Certificate of Technical Studies - Energy Auditor

Missoula College

Degree Specific Credits: 18

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Summary

CODE	TITLE	HOURS
Core Courses		18
Total Hours		18

Course List

Core Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
BGEN 105S	Introduction to Business	3
ETEC 213	Power Systems Technology	3
M 121	College Algebra	3
NRGY 101N	Intro to Sustainable Energy	3
NRGY 195	Practicum	2
NRGY 235	Building Energy Efficiency	4
Total Hours		18

Course List

Minimum Required Grade: C-

Food Service Management A.A.S.

- Overview
- Requirements

Aimee Elliot, 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

Degree Specific Credits: 65

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: See Program Director for scope and sequence advising. Please refer to online schedule for online course availability.

Summary

Course List		
CODE	**TITLE**	**HOURS**
Food Service Management Required Courses		65
Total Hours		65

Food Service Management Required Courses

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
BMGT 216	Psych of Mgmt & Supervision	4
CAPP 120	Introduction to Computers	3
COMX 115S	Introduction to Interpersonal Communications	3
CULA 101	Introduction to Food Service	5
CULA 105	Food Service Sanitation	2
CULA 156	Dining Room Procedures	3
CULA 157	Pantry & Garde Manger	3
CULA 158	Short Order Cookery	4
CULA 160	Soups, Stocks, & Sauces	3
CULA 161	Meats & Vegetables	3
CULA 165	Baking & Pastry	3
CULA 205	Catering Mangement	2
CULA 210	Nutritional Cooking	3
CULA 270	Purchasing and Cost Controls	5
CULA 275	Patisserie	2
CULA 298	Food Service Internship	4
CULA 299	Culinary Arts Capstone	4
M 105	Contemporary Mathematics	3
PSYX 100S	Intro to Psychology	3
WRIT 121	Intro to Technical Writing	3
or WRIT 101	College Writing I	
Total Hours		65

Minimum Required Grade: C-

Health Information Technology Certificate < University of Montana

Health Information Technology Certificate

Certificate of Completion - Health Information Technology

Missoula College

Degree Specific Credits: 12-18

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Summary

CODE	TITLE	HOURS
Complete one of the following tracks:		
Computing Track		12
Health Professional Track		18

Course List

Computing Track

Note: This certificate requires both the courses listed below and the successful completion of a degree in a computing-related field, i.e. Information Technology.

CODE	TITLE	HOURS
Complete all of the following courses:		
AHMS 144	Medical Terminology	3
AHMS 156	Medical Billing Fundamentals	3
HIT 101	Intro to Healthcare Informatic	3
HIT 265	Electronic Health Records	3
Total Hours		12

Course List

Minimum Required Grade: C-

Health Professions Track

Note: This certificate requires the courses below in addition to the successful completion of a degree in a clinical health profession-related field, i.e. nursing.

CODE	TITLE	HOURS
Complete all of the following courses:		
CSCI 172	Intro to Computer Modeling	3
CSCI 240	Databases and SQL	3
HIT 101	Intro to Healthcare Informatic	3
HIT 265	Electronic Health Records	3
ITS 150	CCNA 1: Exploration	3
ITS 210	Network OS - Desktop	3
Total Hours		18

Course List

Minimum Required Grade: C-

Hospitality Management A.A.S. < University of Montana

Hospitality Management A.A.S.

- Overview
- Requirements

Aimee Elliott, Director

The Associate of Applied Science in Hospitality Management develops the skills students will use in the hospitality and tourism industry and provides students with the knowledge and practical experience in the major areas of management and operation, including accounting, customer service, hotel management/operation, restaurant management/operation, purchasing, and sanitation practices in food service. Graduates prepare for entry-level, professional careers involving business support for restaurants, hotels, resorts, and other hospitality and tourism organizations.

The AAS degree option is five semesters, which includes a hospitality geared internship to allow extensive hands-on learning in the industry.

Associate of Applied Science - Hospitality Management

Missoula College

Degree Specific Credits: 63

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: See Program Director for scope and sequence advising. Please refer to online schedule for online course availability.

Summary

CODE	TITLE	HOURS
Hospitality Management Core Courses		60
Hospitality Management Elective		3
Total Hours		63

Course List

Hospitality Management Core Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
ACTG 101	Accounting Procedures I	4
ACTG 102	Accounting Procedures II	4
BGEN 105S	Introduction to Business	3
BMGT 216	Psych of Mgmt & Supervision	4
BMGT 245	Customer Service Management	4
COMX 111A	Introduction to Public Speaking	3
CSCI 172	Intro to Computer Modeling	3
CULA 101	Introduction to Food Service	5
CULA 105	Food Service Sanitation	2
CULA 270	Purchasing and Cost Controls	5
CULA 299	Culinary Arts Capstone	4
HTR 107	Intro Hospitality Management	3
HTR 201	Hotel Mngmt/Ops	3
HTR 298	Internship	4
M 115	Probability and Linear Mathematics	3
PSYX 100S	Intro to Psychology	3
WRIT 101	College Writing I	3
Total Hours		60

Course List

Minimum Required Grade: C-

Hospitality Management Electives

Note: Other courses may satisfy this requirement at the discretion of the Hospitality Management program director.

CODE	TITLE	HOURS
Complete 3 credits in in the following courses:		3
BFIN 205S	Personal Finance	
BGEN 220E	Business Ethics and Social Responsibility	
BGEN 235	Business Law	
BMGT 242	Front Line Supervision	
BMGT 275	Venue Management	
BMKT 225	Marketing	
BMKT 265	Social Media Strat & Mgmt	
CULA 156	Dining Room Procedures	
CULA 165	Baking & Pastry	
CULA 210	Nutritional Cooking	
PTRM 141Y	National Parks and American Culture	
PTRM 150	Current Issues in PTRM	
PTRM 210S	Nature Tourism & Comm Rec	
PTRM 217S	Parks & Outdoor Rec. Mgmt.	

Course List

Minimum Required Grade: C-

Hospitality Management C.A.S. < University of Montana

Hospitality Management C.A.S.

- Overview
- Requirements

Aimee Elliott, Director

The Certificate of Applied Science in Hospitality Management develops the skills students will use in the hospitality and tourism industry and provides students with the knowledge and practical experience in the major areas of management and operation: accounting, customer service, marketing/sales, and hotel management/operation. Graduates prepare for entry-level, professional careers involving business support for restaurants, hotels, resorts, casinos, and other hospitality and tourism organizations.

The certificate option is two semesters. If students wish to expand their education beyond a certificate, the program also allows seamless transition into the AAS in Hospitality Management and/or Food Service Management.

Certificate of Applied Science - Hospitality Management

Missoula College

Degree Specific Credits: 27

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Summary

CODE	TITLE	HOURS
Hospitality Management Core Courses		27
Total Hours		27

Course List

Hospitality Management Core Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
ACTG 101	Accounting Procedures I	4
ACTG 102	Accounting Procedures II	4
BMGT 245	Customer Service Management	4
HTR 107	Intro Hospitality Management	3
HTR 201	Hotel Mngmt/Ops	3
M 115	Probability and Linear Mathematics	3
PSYX 100S	Intro to Psychology	3
WRIT 101	College Writing I	3
Total Hours		27

Course List

Minimum Required Grade: C-

Information Technology A.A.S. - Network Administration and Security < University of Montana

Information Technology A.A.S. - Network Administration and Security

- Overview
- Requirements

Victor Valgenti, Program Director

Network Administrator has become a common job title across all career fields. The Network Administration and Security concentration provides students with a background in network administration for supporting users and computing in a networked environment. Coursework in network operating systems, server administration, routers, switches, security, and IP telephony are all embedded in the Network Administration and Security concentration.

The University of Montana is a Cisco Networking Academy, CompTIA Authorized Academy, and a member of the Microsoft Developers Network Academic Alliance. Opportunities exist for professional certification from Cisco (CCNA, CCENT, CCVA), Microsoft and Comp TIA (A+, Network+ and Security+).

Associate of Applied Science - Information Technology; Network Administration and Security Concentration

Missoula College

Degree Specific Credits: 60-61

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Summary

CODE	TITLE	HOURS
Information Technology Core Courses		28
Mathematics		3-4
Network Administration and Security Concentration Requirements		29
Total Hours		60-61

Course List

Information Technology Core Courses

Note: Completion of IT core courses fulfills requirements for the C.A.S. in Computer Support.

CODE	TITLE	HOURS
Complete all of the following courses:		
BGEN 105S	Introduction to Business	3
CSCI 105	Computer Fluency	3
CSCI 135	Fund of Computer Science I	3
CSCI 172	Intro to Computer Modeling	3
ITS 150	CCNA 1: Exploration	3
ITS 165	OS Commands and Scripts	3
ITS 210	Network OS - Desktop	3
ITS 280	Computer Repair & Maint.	3
ITS 289	Professional Certification	1
WRIT 101	College Writing I	3
Total Hours		28

Course List

Minimum Required Grade: C-

Mathematics

CODE	TITLE	HOURS
Complete any Mathematics course with course number 115 or higher.		3-4
Total Hours		3-4

Course List

Minimum Required Grade: C-

Network Administration and Security Concentration Requirements

CODE	TITLE	HOURS
Complete all of the following courses:		
COMX 111A	Introduction to Public Speaking	3
CSCI 215E	Social & Ethical Issues in CS	3
ITS 152	CCNA 2: Exploration	3
ITS 212	Network OS - Server Admin	3
ITS 214	Network OS - Infrastructure	3
ITS 221	Project Management	3
ITS 222	Enterprise Security	3
ITS 250	CCNA 3: Exploration	3
ITS 252	CCNA 4: Exploration	3
ITS 298	Internship/Cooperative Educati	2
Total Hours		29

Course List

Minimum Required Grade: C-

Information Technology A.A.S. - Programming and App Development

- Overview
- Requirements

Victor Valgenti, Program Director

Programming and App Development concentration emphasizes application development and business processes. Students learn to write software using an object-oriented programming paradigm for deployment to the web and the desktop. Relational database design, structured query language (SQL), and the ability to create applications which push and pull information from databases are highlighted. Graduates seek careers as computer support specialists, help desk technicians, web developers, software developers, and database administrators.

Associate of Applied Science - Information Technology; Programming and App Development Concentration

Missoula College

Degree Specific Credits: 60-61

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Summary

Course List		
CODE	**TITLE**	**HOURS**
Information Technology Core Courses		28
Mathematics		3-4
Programming and App Development Concentration Requirements		23
Programming and App Development Directed Electives		6
Total Hours		60-61

Information Technology Core Courses

Note: Completion of IT core courses fulfills requirements for C.A.S. in Computer Support.

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
BGEN 105S	Introduction to Business	3
CSCI 105	Computer Fluency	3
CSCI 135	Fund of Computer Science I	3
CSCI 172	Intro to Computer Modeling	3
ITS 150	CCNA 1: Exploration	3
ITS 165	OS Commands and Scripts	3
ITS 210	Network OS - Desktop	3
ITS 280	Computer Repair & Maint.	3
ITS 289	Professional Certification	1
WRIT 101	College Writing I	3
Total Hours		28

Minimum Required Grade: C-

Mathematics

Course List		
CODE	**TITLE**	**HOURS**
Complete any Mathematics course with course number 115 or higher.		3-4
Total Hours		3-4

Minimum Required Grade: C-

Programming and App Development Concentration Requirements

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
COMX 111A	Introduction to Public Speaking	3
CSCI 113	Programming with C++ I	3
CSCI 136	Fund of Computer Science II	3
CSCI 215E	Social & Ethical Issues in CS	3
CSCI 221	System Analysis and Design	3
CSCI 240	Databases and SQL	3
ITS 298	Internship/Cooperative Educati	2
MART 232	Interactive Web II	3
Total Hours		23

Minimum Required Grade: C-

Programming and App Development Directed Electives

Note: Directed electives must be approved by student's advisor. Examples of directed electives may include courses from the ACTG, BGEN, COMX, CSCI, DDSN, ITS, or WRIT rubrics. A student may request substitution of other courses to fulfill the directed elective requirement provided a clear connection can be made between a course, a student's career objective, and the degree program. All substitution requests require departmental approval.

Course List		
CODE	**TITLE**	**HOURS**
Complete two directed elective courses (minimum of 6 credits) selected with your advisor.		6
Total Hours		6

Minimum Required Grade: C-

Management A.A.S. - Entrepreneurship < University of Montana

Management A.A.S. - Entrepreneurship

- Overview
- Requirements

Entrepreneurship is more than a title. It s a spirit, a drive, a creative path to success! Twenty seven million working-age Americans, nearly 14%, an all-time high, are starting or running new businesses according to Global Entrepreneurship Monitor in 2015. This option integrates a foundation in business skills with constructing your business plan, generating financing, and beginning operations. Emphasis in accounting, sales strategy, advertising and marketing and supervision, including computer technology and web development. Successful graduates will depart with a real-world internship experience, a comprehensive business plan, and presentation skills required to approach financiers and seek opportunities.

Associate of Applied Science - Management; Entrepreneurship Concentration

Missoula College

Degree Specific Credits: 62

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: See Program Director for advising regarding scope and sequence, course prerequisites, and math and writing placement assessments.

Summary

CODE	TITLE	HOURS
Management Core Courses		49
Entrepreneurship Concentration Courses		13
Total Hours		62

Course List

Management Core Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
ACTG 101	Accounting Procedures I	4
BGEN 105S	Introduction to Business	3
BGEN 235	Business Law	3
BMGT 216	Psych of Mgmt & Supervision	4
BMGT 298	Management Internship	2
BMKT 112	Applied Sales	3
BMKT 225	Marketing	3
or BGEN 160S	Issues in Sustainability	
BMKT 240	Advertising	3
CAPP 120	Introduction to Computers	3
COMX 111A	Introduction to Public Speaking	3
COMX 115S	Introduction to Interpersonal Communications	3
CSCI 172	Intro to Computer Modeling	3
or CAPP 156	MS Excel	
M 115	Probability and Linear Mathematics	3
MART 214	Digital Publishing & Design	3
MART 232	Interactive Web II	3
or BMKT 265	Social Media Strat & Mgmt	
WRIT 101	College Writing I	3
Total Hours		49

Course List

Minimum Required Grade: C-

Entrepreneurship Concentration Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
ACTG 102	Accounting Procedures II	4
ACTG 180	Payroll Accounting	3
BFIN 205S	Personal Finance	3
BMGT 299	Capstone:Entrepreneurship	3
Total Hours		13

Course List

Minimum Required Grade: C-

Management A.A.S. - Sales and Marketing < University of Montana

Management A.A.S. - Sales and Marketing

- Overview
- Requirements

Seek middle to advanced positions in the sales and marketing field by continuing the certificate program in technical sales and promotional strategies. Gain foundational skills in customer care, psychology, management, relationship-building, and negotiation skills to:

- Understand your audience
- Research and demonstrate effective sales techniques
- Plan and implement effective visual displays and presentations
- Develop sound organizational record keeping and financial controls
- Manage accounts

Additional emphasis in computer skills, accounting, and technical writing provide students the needed edge for this competitive career. Graduates are prepared to own and operate their own businesses or become sales representatives and managers in a variety of organizations.

Associate of Applied Science - Management; Sales and Marketing Concentration

Missoula College

Degree Specific Credits: 62

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: See Program Director for advising regarding scope and sequence, course prerequisites, and math and writing placement assessments.

Summary

CODE	TITLE	HOURS
Management Core Courses		49
Sales & Marketing Concentration Courses		13
Total Hours		62

Course List

Management Core Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
ACTG 101	Accounting Procedures I	4
BGEN 105S	Introduction to Business	3
BGEN 235	Business Law	3
BMGT 216	Psych of Mgmt & Supervision	4
BMGT 298	Management Internship	2
BMKT 112	Applied Sales	3
BMKT 225	Marketing	3
BMKT 240	Advertising	3
CAPP 120	Introduction to Computers	3
COMX 111A	Introduction to Public Speaking	3
COMX 115S	Introduction to Interpersonal Communications	3
CSCI 172	Intro to Computer Modeling	3
or CAPP 156	MS Excel	
M 115	Probability and Linear Mathematics	3
MART 214	Digital Publishing & Design	3
MART 232	Interactive Web II	3
WRIT 101	College Writing I	3
Total Hours		49

Course List

Minimum Required Grade: C-

Sales & Marketing Concentration Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
BMGT 212	Critical Analysis for Business	3
BMGT 245	Customer Service Management	4
BMKT 109	Visual Merchandising & Display	3
COMX 250	Intro to Public Relations	3
Total Hours		13

Course List

Medical Claims Specialist C.T.S. < University of Montana

Medical Claims Specialist C.T.S.

- Overview
- Requirements

Michelle Boller, Director

Students are prepared academically and professionally for claim specialist positions in insurance organizations and healthcare facilities. In this fast-track program, students will learn foundational skills to:

Understand medical terminology and human biology

Understand medical benefit plans and the claims process to responsibly verify the accuracy and receipt of claims and the analysis of information for processing claims to promote accurate and prompt reimbursement

Communicate professionally between peers, vendors, management, and customers in order to provide exceptional customer service

Recommend claims action steps to promote accurate and prompt reimbursement

Additionally graduates will work collaboratively with other team members to ensure the most positive service experience to both customers and vendors.

Certificate of Technical Studies - Medical Claims Specialist

Missoula College

Degree Specific Credits: 22

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: See Program Director for scope and sequence advising. Please refer to online schedule for online course availability.

Summary

CODE	TITLE	HOURS
Medical Claims Specialist Required Courses		22
Total Hours		22

Course List

Medical Claims Specialist Required Courses

Note: Substitutions are approved at the discretion of the program director.

CODE	TITLE	HOURS
Complete all of the following courses:		
AHMS 108	Health Data Content & Struct	2
AHMS 144	Medical Terminology	3
AHMS 156	Medical Billing Fundamentals	3
AHMS 252	Computerized Medical Billing	3
BIOH 108	Basic Anatomy	4
BMGT 245	Customer Service Management	4
CAPP 120	Introduction to Computers	3
Total Hours		22

Course List

Minimum Required Grade: C-

Medical Information Technology A.A.S. - Health Information Coding Specialty < University of Montana

Medical Information Technology A.A.S. - Health Information Coding Specialty

- Overview
- Requirements

Michelle Boller, Director

Associate of Applied Science - Medical Information Technology; Health Information Coding Concentration

Missoula College

Degree Specific Credits: 67

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: See Program Director for scope and sequence advising. Please refer to online schedule for online course availability.

Summary

CODE	TITLE	HOURS
Core Courses		55
Coding Courses - Great Falls-MSU		12
Total Hours		67

Course List

Core Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
AHMS 108	Health Data Content & Struct	2
AHMS 144	Medical Terminology	3
AHMS 156	Medical Billing Fundamentals	3
AHMS 216	Pharmaceutical Products	3
AHMS 220	Medical Office Procedures	4
AHMS 245	Simulated Lab	3
AHMS 252	Computerized Medical Billing	3
AHMS 270E	Medical Ethics	3
AHMS 298	Medical Info Internship	3
BIOH 108	Basic Anatomy	4
CAPP 120	Introduction to Computers	3
CAPP 154	MS Word	3
COMX 115S	Introduction to Interpersonal Communications	3
CSCI 172	Intro to Computer Modeling	3
HIT 265	Electronic Health Records	3
M 105	Contemporary Mathematics	3
or M 115	Probability and Linear Mathematics	
PSYX 100S	Intro to Psychology	3
WRIT 101	College Writing I	3
Total Hours		55

Course List

Minimum Required Grade: C-

Coding Courses - Great Falls-MSU

Note: AHMS 160, 164, 212, and 213 are taken through Great Falls College-MSU. Students must also take AHMS 201 at Great Falls College-MSU in order to register for AHMS 160 and 164. See program director for coding course information.

CODE	TITLE	HOURS
Complete all of the following courses:		
AHMS 160	Beginning Procedural Coding	3
AHMS 164	AHMS 164 Beginning Diagnosis Coding: ICD-10	3
AHMS 212	CPT Coding	3
AHMS 213	ICD-10 CODING	3
Total Hours		12

Course List

Minimum Required Grade: C-

Medical Information Technology A.A.S. - Medical Administrative Assisting < University of Montana

Medical Information Technology A.A.S. - Medical Administrative Assisting

- Overview
- Requirements

Michelle Boller, Director
Medical administrative assistants are critical to a healthcare facility. They are the first person a patient talks to or meets when they come in for care. This program offers students a career in this fascinating and high-demand medical field. According to the Bureau of Labor Statistics, positions in these medical areas are expected to increase over 20 percent in the next several years.

In the first year of this program students will receive the Medical Reception certificate. Upon completion, students will continue to develop skills to:

- Effectively and confidentially communicate with patients, maintain patient records, schedule appointments, and transcribe letters and patient chart notes
- Post charges and payments and submit insurance claims using current coding procedures
- Create and update the office procedures manual, assist in improving work flow and office efficiencies, and supervise and communicate with office personnel

Graduates are prepared for employment in clinics, hospitals, private practices, insurance companies, and work-at-home opportunities. Students successfully completing the program are awarded the Associate of Applied Science degree. Students may enter either Autumn or Spring semester.

Associate of Applied Science - Medical Information Technology; Medical Administrative Assisting Concentration

Missoula College

Degree Specific Credits: 63

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: See Program Director for scope and sequence advising. Please refer to online schedule for online course availability.

Summary

CODE	TITLE	HOURS
Core Courses		63
Total Hours		63

Course List

Core Courses

Note: Substitutions are approved at the discretion of the program director.

CODE	TITLE	HOURS
Complete all of the following courses:		
ACTG 101	Accounting Procedures I	4
AHMS 108	Health Data Content & Struct	2
AHMS 144	Medical Terminology	3
AHMS 156	Medical Billing Fundamentals	3
AHMS 216	Pharmaceutical Products	3
AHMS 220	Medical Office Procedures	4
AHMS 252	Computerized Medical Billing	3
AHMS 270E	Medical Ethics	3
AHMS 298	Medical Info Internship	3
BIOH 108	Basic Anatomy	4
BMGT 245	Customer Service Management	4
CAPP 120	Introduction to Computers	3
CAPP 154	MS Word	3
COMX 111A	Introduction to Public Speaking	3
COMX 115S	Introduction to Interpersonal Communications	3
CSCI 172	Intro to Computer Modeling	3
HIT 265	Electronic Health Records	3
M 105	Contemporary Mathematics	3
or M 115	Probability and Linear Mathematics	
PSYX 100S	Intro to Psychology	3
WRIT 101	College Writing I	3
Total Hours		63

Course List

Minimum Required Grade: C-

Medical Reception C.A.S. < University of Montana

Medical Reception C.A.S.

- Overview
- Requirements

Michelle Boller, Director

The Medical Reception Certificate prepares students with the required skills to provide exceptional service to patients in a medical setting, ranging from private practice receptionists to hospital ward secretaries. Students learn how to perform essential duties including:

- Greeting patients, scheduling appointments, screening telephone calls, obtaining and entering patient registration information, releasing appropriate medical information, maintaining medical records, and managing patient flow
- Understanding the financial transactions of a practice with a clear understanding of all the activities in the billing and collection cycle
- Applying foundational knowledge of medical law and the principles of medical ethics as well as the guidelines established by HIPAA.

Upon completion of the program, students receive a Certificate of Applied Science and will be prepared to work as receptionists in healthcare facilities and physician offices.

Certificate of Applied Science - Medical Reception

Missoula College

Degree Specific Credits: 35

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: See Program Director for scope and sequence advising. Please refer to online schedule for online course availability.

Summary

CODE	TITLE	HOURS
Medical Reception Required Courses		35
Total Hours		35

Course List

Medical Reception Required Courses

Note: Substitutions are approved at the discretion of the program director.

CODE	TITLE	HOURS
Complete all of the following courses:		
ACTG 101	Accounting Procedures I	4
AHMS 144	Medical Terminology	3
AHMS 156	Medical Billing Fundamentals	3
AHMS 220	Medical Office Procedures	4
AHMS 252	Computerized Medical Billing	3
AHMS 270E	Medical Ethics	3
CAPP 120	Introduction to Computers	3
CAPP 154	MS Word	3
COMX 115S	Introduction to Interpersonal Communications	3
M 105	Contemporary Mathematics	3
WRIT 101	College Writing I	3
Total Hours		35

Course List

Minimum Required Grade: C-

Paralegal Studies A.A.S. < University of Montana

Paralegal Studies A.A.S.

- Overview
- Requirements

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

Degree Specific Credits: 71

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: This is a two year/four semester in-step degree. If classes are taken out of sequence, additional semesters are required for graduation. Also note, courses with the 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.

Summary

CODE	TITLE	HOURS
Paralegal Studies Required Courses		71
Total Hours		71

Course List

Paralegal Studies Required Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
ACTG 101	Accounting Procedures I	4
BMGT 212	Critical Analysis for Business	3
CAPP 120	Introduction to Computers	3
CAPP 154	MS Word	3
COMX 111A	Introduction to Public Speaking	3
LEG 183	Contracts	2
LEG 184E	Legal Ethics	3
LEG 185	Introduction Paralegal Studies	2
LEG 186	Introduction to Legal Research	2
LEG 187	Leg Res & Wrtg I	2
LEG 188	Prin of Real Estate	2
LEG 189	Criminal Procedures	3
LEG 270	Civil Litigation	3
LEG 272	Computers & Law	3
LEG 282	Contemporary Legal Issues	3
LEG 283	Trial Preparation	3
LEG 285	Family Law	3
LEG 286	Legal Res & Writing II	2
LEG 287	Legal Res. & Writing III	2
LEG 288	Estate Administration	2
LEG 298	Paralegal Studies Internship	2
M 105	Contemporary Mathematics	3
PSCI 210S	Intro to American Government	3
PSYX 100S	Intro to Psychology	4
or BMGT 216	Psych of Mgmt & Supervision	
SOCI 101S	Introduction to Sociology	3
WRIT 101	College Writing I	3
Total Hours		71

Course List

Minimum Required Grade: C-

Recycling Technology C.T.S. < University of Montana

Recycling Technology C.T.S.

Certificate of Technical Studies - Recycling Technology

Missoula College

Degree Specific Credits: 16

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Summary

CODE	TITLE	HOURS
Core Courses		16
Total Hours		16

Course List

Core Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
BGEN 160S	Issues in Sustainability	3
ITS 221	Project Management	3
NRGY 102	Intro to Sustainable Energy II	3
NRGY 241	Alternative Fuels	3
NRGY 270	Recycling Technology	4
Total Hours		16

Course List

Minimum Required Grade: C-

Sales and Marketing Certificate

- Overview
- Requirements

Marketing is a vital function of any organization. The objective is to market and effectively sell products or services to sustain itself, whether for profit or not-for-profit. Opportunity is limitless, the job is never boring, you work with people, and jobs are in demand. You will train in professional sales, learn and practice exceptional customer service, and understand the psychology of selling to assist clients in meeting needs and solving problems. The curriculum also involves marketing activities, bookkeeping functions, and merchandising skills. Successful marketing and sales professionals are creative, self-motivated, optimistic, work well in team environments, are organized and detail-minded.

Certificate of Applied Science - Sales and Marketing

Missoula College

Degree Specific Credits: 35

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: See Program Director for advising regarding scope and sequence, course prerequisites, and math and writing placement assessments.

Summary

Course List		
CODE	**TITLE**	**HOURS**
Sales and Marketing Required Courses		35
Total Hours		35

Sales and Marketing Required Courses

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
ACTG 101	Accounting Procedures I	4
BGEN 105S	Introduction to Business	3
BMGT 245	Customer Service Management	4
BMKT 109	Visual Merchandising & Display	3
BMKT 112	Applied Sales	3
BMKT 225	Marketing	3
CAPP 120	Introduction to Computers	3
COMX 115S	Introduction to Interpersonal Communications	3
CSCI 172	Intro to Computer Modeling	3
or CAPP 156	MS Excel	
M 115	Probability and Linear Mathematics	3
WRIT 101	College Writing I	3
Total Hours		35

Minimum Required Grade: C-

Health Professions Department < University of Montana

Health Professions Department

- Overview
- Programs

Daniel Funsch, Chair

The Health Professions Department of Missoula College-University of Montana prepares students to become competent, caring, ethical professionals and provides the skills and opportunities to jump-start careers in healthcare.

The ideal Health Professions student is one who thinks critically and independently, who cares about others, whose behavior is guided by ethical values, and who is prepared for lifelong learning and leadership in their profession.

Six degree programs are offered:

- Registered Nursing (A.S.)
- Surgical Technology (A.A.S.)
- Respiratory Care (A.A.S.)
- Radiologic Technology (A.A.S.)
- Medical Assisting (A.A.S.)
- Paramedicine (A.A.S.)

These programs share many pre-requisite courses, employ an inter-professional model of learning, and all make use of clinical rotations. During these rotations, students work at healthcare facility partners alongside licensed professionals, with real patients, to develop their skills and confidence.

Admission to each program requires a separate application and can be competitive, so it is important to meet with an advisor early and learn more about your chosen field of study and how to succeed.

Undergraduate

- Medical Assisting A.A.S.
- Paramedicine A.A.S
- Radiologic Technology A.A.S.
- Registered Nursing A.S.
- Respiratory Care A.A.S.
- Surgical Technology A.A.S.

Undergraduate Certificates

- Advanced Medical Imaging Certificate

Advanced Medical Imaging Certificate < University of Montana

Advanced Medical Imaging Certificate

- Overview
- Requirements

The five-credit Advanced Medical Imaging Certificate fulfills the American Registry of Radiologic Technologists certification requirements and is available to registered and licensed radiologic technologists and current Missoula College radiology students.

For more information, please call:

Administrative Assistant, Health Professions - 406-243-7868

Dan Funsch - Program Director, Radiologic Technology - dan.funsch@mso.umt.edu

Certificate of Completion - Advanced Medical Imaging

Missoula College

Degree Specific Credits: 5

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Summary

CODE	TITLE	HOURS
Advanced Medical Imaging Required Courses		5
Total Hours		5

Course List

Advanced Medical Imaging Required Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
AHXR 274	Cross Sectional Anatomy	3
AHXR 275	Physics and Instrumentation	2
Total Hours		5

Course List

Minimum Required Grade: B

Medical Assisting A.A.S.

- Overview
- Requirements

Students in Medical Assisting are cross-trained with skills and knowledge in front office administrative, clinical, and limited laboratory procedures that are designed to assist healthcare practitioners in administering to the needs of patients. Selected administrative skills include scheduling, medical office accounting systems, medical coding and billing, and electronic medical records. Some of the clinical skills the student will learn include assisting with medical examinations, vital signs, administering medications and injections (under supervision), sterilizing instruments and electrocardiography. Laboratory skills will include venipuncture (under supervision), and performing selected CLIA-waived laboratory tests. Additionally, Medical Assisting students will become acquainted with the laws and regulations governing medicine in the ambulatory setting, as well as ethical issues being confronted in the health care arena. The program is designed to prepare the student for an entry-level position in Medical Assisting.

Students may apply for admission by meeting with the program director. Prior to entry, the student must be able to show competency in computers. Each Spring students will have to provide documentation of vaccines, background check, etc. as posted on the program's web page. Because some classes are only offered in a specific semester, plus some courses have pre-requisites or co-requisites, meeting with the program director before each semester is necessary to avoid problems.

Students must earn a C or better in all courses in order to progress and complete the program. This includes being able to pass 100% of psychomotor and affective competencies required in laboratory/procedure courses. A course may be attempted a maximum of two times. At the end of the program the student will perform a 200-hour externship/practicum in an ambulatory facility, such as a clinic or doctor's office. The site must be approved by the Program Director. This provides the student with the opportunity to apply the knowledge and skills learned in a real world setting. Students successfully completing the program will be awarded an Associate of Applied Science degree.

Graduates are encouraged and prepared to take the Registered Medical Assisting exam upon graduation

Associate of Applied Science - Medical Assisting

Missoula College

Degree Specific Credits: 64

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: A minimum of a C in each Medical Assisting core course is required for graduation. Medical Assisting core courses must be completed in no more than 2 attempts. The student must show competence in computer applications to enter the Medical Assisting program.

Summary

Course List		
CODE	**TITLE**	**HOURS**
Core Courses		64
Total Hours		64

Core Courses

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
ACTG 101	Accounting Procedures I	4
AHMA 201	Med Asst Clinical Prcdrs I	4
AHMA 203	Med Asst Clinical Prcdrs II	4
AHMA 280	Medical Assisting Exam Prep	3
AHMA 298	Medical Assisting Externship	5
AHMS 144	Medical Terminology	3
AHMS 156	Medical Billing Fundamentals	3
AHMS 216	Pharmaceutical Products	3
AHMS 220	Medical Office Procedures	4
AHMS 252	Computerized Medical Billing	3
AHMS 270E	Medical Ethics	3
BIOH 108	Basic Anatomy	4
CAPP 120	Introduction to Computers	3
CAPP 154	MS Word	3
COMX 115S	Introduction to Interpersonal Communications	3
HIT 265	Electronic Health Records	3
M 105	Contemporary Mathematics	3
or M 115	Probability and Linear Mathematics	
PSYX 100S	Intro to Psychology	3
WRIT 101	College Writing I	3
Total Hours		64

Minimum Required Grade: C

Paramedicine A.A.S.

- Overview
- Requirements

The Paramedicine Associate of Applied Science program at Missoula College prepares students to provide emergency medical care to victims of illness, accident, or injury, assessing patients and performing critical medical interventions. As members of the allied healthcare team, Paramedics work as part of a comprehensive EMS response, applying their advanced knowledge of human anatomy and physiology to provide advanced life support care to patients.

The primary goal of the Missoula Paramedic Program is to prepare competent entry-level Paramedics in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains with or without exit points at the Advanced Emergency Medical Technician and/or Emergency Medical Technician, and/or Emergency Medical Responder levels.

Paramedics are employed by ambulance services, fire departments, within hospitals, and as members of emergency flight crews. They employ life-saving strategies such as managing airways, establishing vascular access, performing CPR, and administering pharmaceuticals, often while transporting patients to critical care facilities. Students who demonstrate a commitment to life-long learning, civic engagement, and service to their communities are invited to apply.

Missoula College's Paramedicine program is delivered through a community partnership with Missoula Emergency Services, Inc. (MESI), which has been training paramedics since the 1980s. The program is a candidate for Accreditation by the Committee on Accreditation of Educational Programs for EMS Professions (CoAEMSP) and the Commission on Accreditation of Allied Health Education Programs (CAAHEP).

Admission to the program is competitive and requires prior completion of 16 credits of pre-requisite coursework as well as a current NREMT Certification. The program's core classes begin every autumn semester and include 57 credits of classroom and laboratory instruction as well as hundreds of hours of experiential, hands-on clinical training within hospitals and aboard ambulances.

Student progress is evaluated in the classroom through testing of cognitive knowledge and in labs and clinical rotations through observation of the technical and psychomotor skills used in the profession. The program maintains high standards of ethical and professional behavior. Upon graduating, the student qualifies for an examination administered by the National Registry of Emergency Medical Technicians (NREMT), successful completion of which earns a national certification and allows the individual to practice in all states.

Associate of Applied Science - Paramedicine

Missoula College

Degree Specific Credits: 73

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: See Program Director for course prerequisites before applying to program.

Summary

Course List		
CODE	**TITLE**	**HOURS**
Pre-Requisite Courses		16
Core Courses		57
Total Hours		73

Pre-Requisite Courses

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
AHMS 144	Medical Terminology	3
BIOH 108	Basic Anatomy	4
COMX 115S	Introduction to Interpersonal Communications	3
M 105	Contemporary Mathematics	3
WRIT 101	College Writing I	3
Total Hours		16

Minimum Grade: C-

Core Courses

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
ECP 200	Transition to Paramedic Care	3
ECP 201	Paramedic Fundamentals	3
ECP 202	Paramedic Fundamentals Lab	1
ECP 206	EMS Case Studies	4
ECP 207	Cardiology	4
ECP 208	Cardiology Lab & ACLS	1
ECP 216	Hospital Clinical I	5
ECP 220	Special Considerations	1
ECP 221	OB/Neonate/Pediatrics	2
ECP 222	OB/Neonate/Pediatric Lab/PALS/Stable	1
ECP 230	Trauma	2
ECP 232	Pulmonary	2
ECP 233	Trauma/Pulmonary Lab & PHTLS	1
ECP 242	Medical Considerations	2
ECP 243	Medical Lab	1
ECP 246	Hospital Clinical II	6
ECP 247	Hospital Clinical III	6
ECP 250	NREMT Exam Preparation	3
ECP 251	NREMT Exam Preparation Lab	1
ECP 298	Internship	8
Total Hours		57

Minimum Grade: C-

Radiologic Technology A.A.S.

- Overview
- Requirements

Daniel Funsch, Director

A Radiologic Technologist (Radiographer) uses critical thinking and independent judgment to obtain diagnostic medical images while providing 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 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 of applied science 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.

Program Requirements

The Associate of Applied Science 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. Once accepted into the program, students will complete the A.A.S. in 16 months, graduating at the end of the second fall semester.

Students must pass BIOH 201NBIOH 201Nwith 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. 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 or Clinical Coordinator each semester prior to registration.

Application to the program is required spring semester in 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 the majority of classroom courses completed in the first two semesters. Clinical education will begin at the end of the first semester. A twelve-week summer session between the first and second years includes clinical rotations of 400 hours (40 hours/week for 10 weeks). The autumn semester of the second year also requires 400 hours of clinical instruction.

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 spring semester of the program. These sites may include, but are not limited to, Ronan, Hamilton, Plains, and Polson, Montana. Transportation and housing are the student's responsibility.

Associate of Applied Science - Radiologic Technology

Missoula College

Degree Specific Credits: 75

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: Students must complete the pre-requisite core before applying to the Radiologic Technology Program or be in the process of completing the pre-requisite core during the Spring Semester. Applications are due on or around April 1st.

Summary

Course List		
CODE	**TITLE**	**HOURS**
Prerequisite Courses		20
Pre- or Co-requisite Courses		6
Radiologic Technology Courses		49
Total Hours		75

Prerequisite Courses

Note: These courses are taken before applying to the Radiologic Technology program. Along with BIOH 201N, students must register for the BIOH 202N lab section. These must be passed with a minimum grade of B . Students must also have a minimum cumulative GPA of 2.75 in all course work including prerequisite courses to apply to the Radiologic Technology program.

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
AHMS 144	Medical Terminology	3
BIOH 201N	Human Anat Phys I (equiv 301) (minimum grade of B)	4
BIOH 211N	Human Anat Phys II (equiv 311) (minimum grade of C)	4
M 115	Probability and Linear Mathematics	3
or M 121	College Algebra	
SCN 175N	Integrated Physical Science I	3
or CHMY 121N	Introduction to General Chemistry	
WRIT 101	College Writing I	3
or WRIT 121	Intro to Technical Writing	
Total Hours		20

Minimum Required Grade: C-

Pre- or Co-requisite Courses

Note: These courses can be taken either before applying or after being accepted into the program through the application process.

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
AHMS 270E	Medical Ethics	3
COMX 115S	Introduction to Interpersonal Communications	3
or PSYX 100S	Intro to Psychology	
Total Hours		6

Radiologic Technology Courses

Note: These courses cannot be taken unless accepted into the program through the application process.

- AHXR 195 is taken Autumn Semester first year at 1 credit, Spring Semester at 4 credits, and Summer at 10 credits.
- AHXR 295 is taken Autumn Semester second year at 10 credits.
- For AHXR courses the minimum grade is a B.

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
AHXR 100	Intro to Diagnostic Imaging	2
AHXR 101	Patient Care in Radiology	2
AHXR 121	Radiographic Imaging I	3
AHXR 140	Radiographic Methods	3
AHXR 141	Radiology Lab	1
AHXR 160	Radiographic Methods II	3
AHXR 161	Radiographic Methods II Lab	1
AHXR 195	Radiographic Clinical: I	15
AHXR 221	Radiographic Imaging II	3
AHXR 225	Radiobiology/Radiation Protctn	2
AHXR 240	Pathology and Image Analysis	2
AHXR 270	Radiographic Registry Review	2
AHXR 295	Radiographic Clinical: II	10
Total Hours		49

Minimum Required Grade: B

Registered Nursing A.S. < University of Montana

Registered Nursing A.S.

- Overview
- Requirements

Linda Barnes, Nursing Program Director

The Associate of Science in Nursing (A.S.N.) requires four semesters of full-time study. Applicants to the program must have completed all pre-nursing prerequisites, have a cumulative GPA of at least 2.75 (last 60 credits only), and have received a B or better in BIOH 201/202.

Admission to the program requires completion of the application which can be obtained on the Missoula College Health Professions webpage. The number of students accepted into the A.S.N. program is limited to 18 students in Autumn semester and 18 students in Spring semester. 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 Accreditation Commission for the Education in Nursing (ACEN) (3343 Peachtree Road NE, Suite 850, Atlanta, GA 30326).

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 and titer: The three injection Hepatitis B series must be started on or before acceptance into the program so the 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. Basic Life Support (BLS) training Healthcare Provider;

7. Criminal Background Check, including Sexual Offender Registry

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.

Associate of Science - Registered Nursing

Missoula College

Degree Specific Credits: 73-74

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: Students must pass all NRSG courses with a minimum grade of a B. It is highly recommended that students have completed BIOH 211N/BIOH 212N, SOCI 101S, PSYX 100S, BIOM 250N, and BIOM 251 prior to admission to the program.

Summary

CODE	TITLE	HOURS
Registered Nursing Required Courses		67
Writing Requirement		3
Mathematics Requirement		3-4
Total Hours		73-74

Course List

Registered Nursing Required Courses

Note: Students must pass all Nursing (rubric NRSG) courses with a minimum grade of 'B.'

CODE	TITLE	HOURS
Complete all of the following courses:		
BIOH 201N	Human Anat Phys I (equiv 301)	4
BIOH 211N	Human Anat Phys II (equiv 311)	4
BIOM 250N	Microbiology for Hlth Sciences	3
BIOM 251	Microbiology Hlth Sciences Lab	1
CHMY 121N	Introduction to General Chemistry	4
CHMY 122	Introduction to General Chemistry Lab	1
NRSG 230	Nursing Pharmacology	3
NRSG 231	Nursing Pharmacology Lab	2
NRSG 232	Foundations of Nursing	3
NRSG 233	Foundations of Nursing Lab	3
NRSG 234	Adult Nursing I	3
NRSG 235	Adult Nursing I Clinical	2
NRSG 236	Health and Illness of Maternal Nursing	2
NRSG 237	Health and Illness of Maternal Nursing Clinical	1
NRSG 244	Adult Nursing II	3
NRSG 245	Adult Nursing II Clinical	2
NRSG 246	Health and Illness of Child and Family Nursing	2
NRSG 247	Health and Illness of Child and Family Nursing Clinical	1
NRSG 254	Mental Health Concepts	3
NRSG 255	Mental Health Concepts Clinical	1
NRSG 256	Pathophysiology	3
NRSG 259	Adult Nursing III	3

CODE	TITLE	HOURS
NRSG 260	Adult Nursing III Lab	1
NRSG 261	Adult Nursing III Clinical	2
NRSG 266	Managing Client Care for the Registered Nurse	2
NRSG 267	Managing Client Care for the Registered Nurse Clinical	2
PSYX 100S	Intro to Psychology	3
SOCI 101S	Introduction to Sociology	3
Total Hours		67

Course List

Minimum Required Grade: C-

Writing Requirement

Note: Students who have completed WRIT 101, greater than ten years prior to applying to the Missoula College must take the Writing Placement test. If the score on the test places the student in WRIT 101, the transfer credits will be accepted for the nursing program requirements. If the student places below the required standard, then they shall remediate as needed prior to application to the nursing program. All students need to take WRIT 101 for the nursing program.

CODE	TITLE	HOURS
Complete the following course:		
WRIT 101	College Writing I	3
Total Hours		3

Course List

Minimum Required Grade: C-

Mathematics Requirement

Note: M 121 is the recommended math. Courses that substitute for M 121 can be Probability and Linear Math, Pre-calculus with Algebra, or Pre-calculus with Trig , or Calculus. Mathematics and Writing prerequisite coursework should have been completed no more than 10 years prior to application to any specific health professions program. If mathematics and writing prerequisite coursework is greater than 10 years old, the student should take the writing and mathematics placement exams administered by the college (e-write and ALEX respectively). If the student places into a comparable level to the specific course in question then that course shall be accepted as a valid prerequisite for the intended program. If the student places below the required standard then they shall remediate as needed prior to application to the nursing program.

CODE	TITLE	HOURS
Complete one of the following courses:		3-4
M 115	Probability and Linear Mathematics	
M 121	College Algebra (recommended)	
M 151	Precalculus	
M 171	Calculus I	
Total Hours		3-4

Course List

Minimum Required Grade: C-

Respiratory Care A.A.S.

- Overview
- Requirements

Paul J. Crockford, Med, RRT, 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 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, Plains, Butte, Billings, Hamilton, Helena, and Coeur d Alene, Idaho. Transportation and housing are the student's responsibility.

Associate of Applied Science - Respiratory Care

Missoula College

Degree Specific Credits: 71

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

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.

Summary

Course List		
CODE	**TITLE**	**HOURS**
Pre- Respiratory Care Prerequisite Courses		23
Respiratory Care Courses		48
Total Hours		71

Pre- Respiratory Care Prerequisite Courses

Note: Must be completed or be in the process of completing when applying to the program. A minimum GPA of 2.75 for prerequisite courses is required in order to apply to the program.

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
BIOH 201N	Human Anat Phys I (equiv 301)	4
BIOH 211N	Human Anat Phys II (equiv 311)	4
CAPP 120	Introduction to Computers	3
M 115	Probability and Linear Mathematics	3
PSYX 100S	Intro to Psychology	3
SCN 175N	Integrated Physical Science I	3
WRIT 121	Intro to Technical Writing	3
Total Hours		23

Minimum Required Grade: C-

Respiratory Care Courses

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
AHRC 101	Communication Management	1
AHRC 129	Patient Care & Assessment	4
AHRC 131	Resp Care Fundamentals I	5
AHRC 132	Respiratory Care Fundamentals II	3
AHRC 150	Respiratory Care Lab I	1
AHRC 231	Resp Crit Care	4
AHRC 232	Resp Path & Disease	3
AHRC 235	Cardiopulm Anat & Phys	3
AHRC 243	Perinat & Pediat Res Care	3
AHRC 250	Respiratory Care Lab II	2
AHRC 252	Respiratory Care Review	2
AHRC 255	Clinical Experience I	4
AHRC 260	Resp Care Lab III	1
AHRC 265	Clinical Experience II	5
AHRC 270	Resp Care Lab IV	1
AHRC 275	Clinical Exp III	6
Total Hours		48

Minimum Required Grade: B-

Surgical Technology A.A.S.

- Overview
- Requirements

Jill Davis, Director

The Surgical Technology program is designed to prepare the student for employment as a surgical technologist, an integral member of the team of medical practitioners providing surgical care to patients.

Surgical technologists work under the supervision of a surgeon to facilitate the safe and effective conduct of invasive surgical procedures. They ensure that the operating room environment is safe, that equipment functions properly, and that the operative procedure is conducted under conditions that maximize patient safety.

Surgical technologists possess expertise in the theory and application of sterile and aseptic technique and combine the knowledge of human anatomy, surgical procedures, and implementation of instrumentation and technologies to facilitate a physician's performance of invasive therapeutic and diagnostic procedures.

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 of each year. 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 during the first year in the program. A student anticipating program completion will take 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. This credential 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, which may include rural, critical access facilities. During the final semester of the program, internships may be arranged 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 and complete a drug screening. Many healthcare facilities have increasingly stringent requirements. A student may be refused entry into a clinical facility based on information disclosed in the 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 has discontinued its satellite programs in Butte and Billings. Interested students can still apply for a slot in the Missoula-based program with an application deadline of October 1.

The Surgical Technology program is accredited by the Committee on Accreditation of Allied Health Education Programs (CAAHEP), 25400 U. S. Highway 19 North; Suite 158; Clearwater, FL 33763 (www.caahep.org) upon recommendation of the Accreditation Review Council on Education in Surgical Technology and Surgical Assisting (ARC-STSA), 6 West Dry Creek Circle Suite 110 Littleton, CO 80120 (www.arcstsa.org).

Associate of Applied Science - Surgical Technology

Missoula College

Degree Specific Credits: 67

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

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. BIOM 250N and AHMS 270E may be taken prior to applying.

Summary

Course List		
CODE	**TITLE**	**HOURS**
Surgical Technology Prerequisite Courses		19
Surgical Technology Courses		48
Total Hours		67

Surgical Technology Prerequisite Courses

Note: Along with BIOH 201N, students must register for the BIOH 202N lab section. These must be passed with a minimum grade of B .

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
AHMS 144	Medical Terminology	3
BIOH 201N	Human Anat Phys I (equiv 301) (must be passed with a minimum of a B)	4
CAPP 120	Introduction to Computers	3
M 105	Contemporary Mathematics	3
PSYX 100S	Intro to Psychology	3
WRIT 121	Intro to Technical Writing	3
or WRIT 101	College Writing I	
Total Hours		19

Minimum Required Grade: C-

Surgical Technology Courses

Note: Along with BIOH 211N, students must register for the BIOH 212N lab section.

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
AHMS 270E	Medical Ethics	3
AHST 101	Introduction to Surgical Techn	3
AHST 115	Surgical Lab I	2
AHST 154	Surgical Pharmacology	3
AHST 200	Operating Room Techniques	5
AHST 201	Surgical Procedures I	4
AHST 202	Surgical Procedures II	5
AHST 215	Surgical Lab II	2
AHST 250	Surgical Clinical I	4
AHST 251	Surgical Clinical II	5
AHST 298	Surgical Internship	5
BIOH 211N	Human Anat Phys II (equiv 311)	4
BIOM 250N	Microbiology for Hlth Sciences	3
Total Hours		48

Minimum Required Grade: C

Industrial Technology Department < University of Montana

Industrial Technology Department

- Overview
- Programs

Zachary Reddig, 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 2795 37th Avenue, Missoula MT 59804. Some instruction is delivered at the River Campus or Mountain Campus.

All students admitted to Industrial Technology programs are required to submit writing 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 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 writing assessment at their local community college.

Undergraduate

- Diesel Technology A.A.S.
- Sustainable Construction Technology A.A.S.
- Welding Technology A.A.S.

Undergraduate Certificates

- Facility Management Certificate of Applied Science
- Heavy Equipment Operation Certificate of Applied Science
- Precision Machine Technology Certificate of Applied Science
- Green Building Certificate
- Carpentry Certificate of Applied Science
- Construction Management Certificate of Applied Science
- Welding Technology Certificate of Applied Science
- Construction Helper Certificate
- HVAC Technician Certificate
- Precision Machine Technology Certificate

Carpentry C.A.S. < University of Montana

Carpentry C.A.S.

- Overview
- Requirements

This one-year certificate in Carpentry is for students looking to obtain a hands-on working knowledge of basic carpentry skills. Students will get instruction and practice in entry-level skills, including site preparation and layout, concrete forming and placement, residential framing, roofing, siding, and window installation.

Certificate of Applied Science - Carpentry

Missoula College

Degree Specific Credits: 36

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Summary

CODE	TITLE	HOURS
Required Courses		36
Total Hours		36

Course List

Required Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
BMGT 242	Front Line Supervision	3
CAPP 120	Introduction to Computers	3
CSTN 120	Carpentry Bscs & Rough-In Frmg	5
CSTN 122	Beginning Carpentry Lab	5
CSTN 142	Int & Ext Finish Carpentry	4
CSTN 143	Intermediate Carpentry Lab	4
CSTN 171	Site Prep, Found, Concrete Ins	3
M 111	Technical Mathematics	3
NRGY 120	Industrial Safety and Rigging	3
WRIT 101	College Writing I	3
Total Hours		36

Course List

Minimum Required Grade: C-

Construction Helper C.T.S. < University of Montana

Construction Helper C.T.S.

- Overview
- Requirements

This one-semester certificate program is designed to prepare candidates for entry-level positions across the construction industry. Designed to make students job-site ready, the program covers job-site safety as well as a hands on introduction to site and foundation work and basic carpentry.

Certificate of Technical Studies - Construction Helper

Missoula College

Degree Specific Credits: 16

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Summary

CODE	TITLE	HOURS
Required Courses		16
Total Hours		16

Course List

Required Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
CSTN 120	Carpentry Bscs & Rough-In Frmg	5
CSTN 122	Beginning Carpentry Lab	5
CSTN 171	Site Prep, Found, Concrete Ins	3
NRGY 120	Industrial Safety and Rigging	3
Total Hours		16

Course List

Minimum Required Grade: C-

Construction Management C.A.S. < University of Montana

Construction Management C.A.S.

- Overview
- Requirements

The program provides students the opportunity to learn construction skills in a competency based learning environment. In addition to general education courses, students in the program learn the various steps of becoming a successful tradesperson in the construction industry, including safe practices, management and skills competencies. Students construct real world projects and can earn a Certificate of Applied Science and continue for another year to earn an Associate of Applied Science Degree.

Certificate of Applied Science - Construction Management

Missoula College

Degree Specific Credits: 32

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Summary

CODE	TITLE	HOURS
Required Courses		32
Total Hours		32

Course List

Required Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
CAPP 120	Introduction to Computers	3
COMX 111A	Introduction to Public Speaking	3
CSTN 120	Carpentry Bscs & Rough-In Frmg	5
CSTN 142	Int & Ext Finish Carpentry	4
CSTN 171	Site Prep, Found, Concrete Ins	3
CSTN 261	Building Management	4
CSTN 279	Commercial Construction	4
M 121	College Algebra	3
WRIT 101	College Writing I	3
Total Hours		32

Course List

Minimum Required Grade: C-

Diesel Technology A.A.S. < University of Montana

Diesel Technology A.A.S.

- Overview
- Requirements

Jim Headlee, Director

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

Degree Specific Credits: 63

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Summary

CODE	TITLE	HOURS
Required Courses		63
Total Hours		63

Course List

Required Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
CAPP 120	Introduction to Computers	3
COMX 102	Interprsnl Skills in Workplace	1
DST 120	Electrical Systems	8
DST 128	Engine Service I	4
DST 135	Power Trains	7
DST 221	Brakes Suspn and Undercarr	6
DST 225	Hydraulics	6
DST 229	Engine Service II	7
DST 230	Air Conditioning	3
DST 231	Fuel Systems	5
DST 235	Advanced Power Trains	2
M 111	Technical Mathematics	3
MCH 115	Related Metals Processes III	3
WLDG 101	Welding Fund Auto Tech/Diesel	2
WRIT 121	Intro to Technical Writing	3
Total Hours		63

Course List

Minimum Required Grade: C-

Facility Management C.A.S. < University of Montana

Facility Management C.A.S.

- Overview
- Requirements

The mission of the Facility Management Certificate program is to provide the regional workforce with credentialed, skilled, and competent facility management professionals and to be responsive to emerging workforce needs.

Students in the Facility Management program are trained as facility management 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 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 William Hillman, Program Director, at 406-243-7645 or email for more information.

Certificate of Applied Science - Facility Management

Missoula College

Degree Specific Credits: 33

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Summary

CODE	TITLE	HOURS
Required Courses		33
Total Hours		33

Course List

Required Courses

Rule: All courses required

CODE	TITLE	HOURS
CAPP 120	Introduction to Computers	3
COMX 102	Interprsnl Skills in Workplace	1
FME 122	Electricity	6
FME 123	Carpentry	6
or CSTN 120	Carpentry Bscs & Rough-In Frmg	
FME 127	High/Low Pressure Boilers	3
FME 128	Plumbing & Maintenance	3
FME 130	Heating & Air Conditioning	6
M 111	Technical Mathematics	3
WRIT 121	Intro to Technical Writing	3
Total Hours		34

Course List

Minimum Required Grade: C-

Green Building C.T.S. < University of Montana

Green Building C.T.S.

- Overview
- Requirements

The mission of this one-year certificate is to give students an overview of the green building industry with instruction and hands-on experience in the principles of green building, energy efficiency, green rating systems, including the ICC700 and LLED programs, and prepare them for further study or entry-level careers in the emerging green building industry.

Certificate of Technical Studies - Green Building

Missoula College

Degree Specific Credits: 30

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Summary

CODE	TITLE	HOURS
Required Courses		30
Total Hours		30

Course List

Required Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
BGEN 160S	Issues in Sustainability	3
BMGT 242	Front Line Supervision	3
CAPP 120	Introduction to Computers	3
CSTN 191	Special Topics	1
CSTN 261	Building Management	4
CSTN 282	Green Bldg Concept & Design I	4
CSTN 283	Green Bldg Concept & Design II	3
or NRGY 235	Building Energy Efficiency	
CSTN 286	Advanced Wood Buildings	3
M 111	Technical Mathematics	3
WRIT 121	Intro to Technical Writing	3
Total Hours		30

Course List

Minimum Required Grade: C-

HVAC Technician Certificate < University of Montana

HVAC Technician Certificate

- Overview
- Requirements

Students in this 18-credit, 200-hour program will be introduced to the fundamentals of heating, ventilating, and air conditioning. The program covers heating and refrigeration cycles, gas furnaces, refrigerants, system evacuation and charging, as well as meters and components used in associated systems. Upon successful completion, students will sit for the Universal 608 EPA exam. In addition, the course covers the electrical laws and principles pertaining to DC and AC circuits, which includes current, voltage, resistance, power, load, panels, feeders, lamps, motors, and fuses, and an introduction to wiring methods and materials. The program also includes installation and replacement of air conditioning equipment, heaters, GFCIs, switches, receptacles, raceways, and thermostats in conformance with the National Electric Code (NEC).

Certificate of Completion - HVAC Technician

Missoula College

Degree Specific Credits: 18

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Summary

CODE	TITLE	HOURS
Required Courses		18
Total Hours		18

Course List

Required Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
FME 122	Electricity	6
FME 130	Heating & Air Conditioning	6
FME 192	Independent Study	3
NRGY 120	Industrial Safety and Rigging	3
Total Hours		18

Course List

Minimum Required Grade: C-

Heavy Equipment Operation C.A.S. < University of Montana

Heavy Equipment Operation C.A.S.

- Overview
- Requirements

Joseph Janssen, Director

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.

This is an Autumn Semester entry program, and enrollment is limited. Prospective students are encouraged to apply early. Contact Joseph Janssen, Program Director, at 406-243-7643 or email for more information.

Certificate of Applied Science - Heavy Equipment Operation

Missoula College

Degree Specific Credits: 37

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Summary

CODE	TITLE	HOURS
Required Courses		37
Total Hours		37

Course List

Required Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
CAPP 120	Introduction to Computers	3
COMX 102	Interprsnl Skills in Workplace	1
HEO 146	Safety & Basic Controls	5
HEO 148	Operational Skill Bldg	5
HEO 150	Job Simulation	6
HEO 151	Service & Maintenance	2
HEO 153	Const. Theory & Spec. Equip.	5
M 111	Technical Mathematics	3
SRVY 108	Construction Surveying	2
WLDG 103	Welding Fund Constructn Trades	2
WRIT 121	Intro to Technical Writing	3
Total Hours		37

Course List

Minimum Required Grade: C-

Precision Machine Technology C.A.S. < University of Montana

Precision Machine Technology C.A.S.

- Overview
- Requirements

The Precision Machine Technology Certificate of Applied Science program provides instruction in the theory and operation of mills and lathes, both manual and CNC, other tools related to the machinist trade, and associated programming. Students can earn NIMS credentials in all phases of the training. Upon completion of this program, students will enter employment in the machining industry, pursue apprenticeship in machining, or further their education toward higher academic degrees.

Certificate of Applied Science - Precision Machine Technology

Missoula College

Degree Specific Credits: 35

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Summary

CODE	TITLE	HOURS
Required Courses		35
Total Hours		35

Course List

Required Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
BMGT 242	Front Line Supervision	3
MCH 101	Introduction to Manufacturing Processes	1
MCH 102	Introduction to Manufacturing Materials	2
MCH 120	Blueprint Reading & Interpretation for Machining	3
MCH 122	Introduction to CAM	3
MCH 125	Introduction to CNC Lathes	3
MCH 127	Introduction to CNC Mills	3
MCH 129	Machine Quality Control and Precision Measurements	3
MCH 130	Machine Shop	3
MCH 132	Introduction to Manual Engine Lathes	4
MCH 134	Introduction to Manual Mills	4
WRIT 121	Intro to Technical Writing	3
Total Hours		35

Course List

Minimum Required Grade: C-

Precision Machine Technology C.T.S. < University of Montana

Precision Machine Technology C.T.S.

- Overview
- Requirements

The Certificate of Technical Studies in Precision Machine Technology provides instruction in the theory and operation of manual mills and lathes, precision measurements, blueprint reading, and the use of other tools related to the machinist trade. Students can earn NIMS credentials in all phases of the training. Upon completion of this program, students will enter the workforce at entry level, pursue apprenticeship, or continue their machining training to earn the CAS.

Certificate of Technical Studies - Precision Machine Technology

Missoula College

Degree Specific Credits: 15

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Summary

CODE	TITLE	HOURS
Required Courses		15
Total Hours		15

Course List

Required Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
MCH 101	Introduction to Manufacturing Processes	1
MCH 120	Blueprint Reading & Interpretation for Machining	3
MCH 129	Machine Quality Control and Precision Measurements	3
MCH 132	Introduction to Manual Engine Lathes	4
MCH 134	Introduction to Manual Mills	4
Total Hours		15

Course List

Minimum Required Grade: C-

Sustainable Construction Technology A.A.S. < University of Montana

Sustainable Construction Technology A.A.S.

- Overview
- Requirements

John Freer, Director

This two-year Associate of Applied Science course of study is designed to prepare students for a wide range of building industry career paths. Students will get hands-on training in various job-site skills, including safety training as well as instruction and practice in entry-level skills, including site preparation and layout, plumbing, electrical, concrete forming and placement, residential framing, roofing, siding, and window installation. Students pursuing a certification in Green Building or HVAC can apply those credits toward this degree.

Additionally, students will be exposed to basic job-site control practices, scheduling, estimating, and the major guiding principles of green building and sustainable construction. Working on an actual on-site modular home, students completing the program will have experience and exposure to all aspects of residential construction, including foundations, framing, roofing, siding, insulation, drywall, cabinetry, floor finishes, and the process of basic project management.

Associate of Applied Science - Sustainable Construction Technology

Missoula College

Degree Specific Credits: 61

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Summary

CODE	TITLE	HOURS
Required Courses		43
Elective Courses		18
Total Hours		61

Course List

Required Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
BMGT 242	Front Line Supervision	3
CAPP 120	Introduction to Computers	3
CSTN 120	Carpentry Bscs & Rough-In Frmg	5
CSTN 122	Beginning Carpentry Lab	5
CSTN 142	Int & Ext Finish Carpentry	4
CSTN 143	Intermediate Carpentry Lab	4
CSTN 282	Green Bldg Concept & Design I	4
CSTN 283	Green Bldg Concept & Design II	3
DDSN 114	Introduction to CAD	3
M 111	Technical Mathematics	3
NRGY 120	Industrial Safety and Rigging	3
WRIT 101	College Writing I	3
or WRIT 121	Intro to Technical Writing	
Total Hours		43

Course List

Minimum Required Grade: C-

Elective Courses

CODE	TITLE	HOURS
Complete 18 credits of the following courses:		18
CSTN 171	Site Prep, Found, Concrete Ins	
CSTN 205	Advanced Carpentry Lecture	
CSTN 206	Advanced Carpentry Lab	
CSTN 278	Applied Building Practices Lab	
CSTN 279	Commercial Construction	
CSTN 286	Advanced Wood Buildings	
CSTN 291	Special Topics	
CSTN 299	Capstone: Carpentry	
FME 122	Electricity	
FME 127	High/Low Pressure Boilers	
FME 128	Plumbing & Maintenance	
FME 130	Heating & Air Conditioning	
WLDG 103	Welding Fund Constructn Trades	
Total Hours		18

Course List

Minimum Required Grade: C-

Welding Technology A.A.S. < University of Montana

Welding Technology A.A.S.

- Overview
- Requirements

Zach Reddig, Director

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. For more detailed information, visit our web site or contact Zach Reddig, Program Director, at 406-243-7644 or by email.

Associate of Applied Science - Welding Technology

Missoula College

Degree Specific Credits: 62

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

CODE	TITLE	HOURS
First Year Welding Program		35
Second Year Welding Program		27
Total Hours		62

Course List

First Year Welding Program

CODE	TITLE	HOURS
Complete all of the following courses:		
CAPP 120	Introduction to Computers	3
COMX 102	Interprsnl Skills in Workplace	1
M 111	Technical Mathematics	3
MCH 114	Related Metals Processes II	3
WLDG 117	Blueprint Rdng & Weldng Symbls	3
WLDG 145	Fabrication Basics	4
WLDG 150	Welding Layout Techniques	2
WLDG 180	Shielded Metal Arc Welding	4
WLDG 184	OSHA Rules & Regulations Wldng	1
WLDG 187	Flux Core Arc Welding	4
WLDG 205	Applied Metallurgy	4
WRIT 121	Intro to Technical Writing	3
Total Hours		35

Course List

Minimum Required Grade: C-

Second Year Welding Program

CODE	TITLE	HOURS
Complete all of the following courses:		
BMGT 242	Front Line Supervision	3
DDSN 114	Introduction to CAD	3
WLDG 210	Pipe Welding - Integrated Lab	4
WLDG 215	GTAW (integrated lab)	4
WLDG 245	Metal Fab Design/Construction	4
WLDG 275	Gas Metal Arc Welding	4
WLDG 280	Weld Testing Certification	2
WLDG 285	Automation in Welding	3
Total Hours		27

Course List

Minimum Required Grade: C-

Welding Technology C.A.S. < University of Montana

Welding Technology C.A.S.

- Overview
- Requirements

Zach Reddig, Director

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. For more detailed information, visit our web site, or contact Zach Reddig, Program Director, at 406-243-7644 or by email.

Certificate of Applied Science - Welding Technology

Missoula College

Degree Specific Credits: 37

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Summary

CODE	TITLE	HOURS
Required Courses		37
Total Hours		37

Course List

Required Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
CAPP 120	Introduction to Computers	3
COMX 115S	Introduction to Interpersonal Communications	3
M 111	Technical Mathematics	3
MCH 114	Related Metals Processes II	3
WLDG 117	Blueprint Rdng & Weldng Symbls	3
WLDG 145	Fabrication Basics	4
WLDG 150	Welding Layout Techniques	2
WLDG 180	Shielded Metal Arc Welding	4
WLDG 184	OSHA Rules & Regulations Wldng	1
WLDG 187	Flux Core Arc Welding	4
WLDG 205	Applied Metallurgy	4
WRIT 121	Intro to Technical Writing	3
Total Hours		37

Course List

Minimum Required Grade: C-

Phyllis J. Washington College of Education < University of Montana

Phyllis J. Washington College of Education

Adrea Lawrence, Interim Dean
Susan Harper-Whalen, Associate Dean

The Phyllis J. Washington College of Education is comprised of four academic departments:

- Counseling
- Educational Leadership
- Global Youth Development
- Teaching and Learning

It is also the home for the Institute for Educational Research and Service (IERS).

Mission: The Phyllis J. Washington College of Education 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 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 Departments of Teaching and Learning, Educational Leadership, and Counseling 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).

Central to its research and outreach efforts with P/K-12 schools, the College of Education's 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 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 are described in the various departmental sections of this catalog.

Counseling Department < University of Montana

Counseling Department

Veronica Johnson, Chair

The Counselor Education program educates students for employment in school (K-12 and higher education) and community mental health and human service settings. At the doctoral level, students are trained as counselor educators in faculty positions in higher education and in leadership positions in the counseling profession. Counselors are practitioners, consultants, and coordinators who assist in problem solving, decision-making, personal growth and development, in 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:

1. Human growth and development,
2. Social and cultural foundations,
3. The helping relationship,
4. Group theories and methods,
5. Career and lifestyle development,
6. Client assessment and evaluation,
7. Research and program evaluation, and
8. Ethics and professional orientation.

At the Master s level, we offer a School Counseling M.A. and a Clinical Mental Health Counseling M.A. Both options requires additional specialty courses and comprehensive written and oral examinations focused on the student's career track. The more advanced graduate degrees (Ed.S., Ed.D., and Ph.D.) develop depth, supervisory, and leadership skills in these areas.

The M.A., Ed.S., Ed.D., and Ph.D. are offered in Counselor Education. Information regarding specific requirements and program options is available from the Phyllis J. Washington College of Education and Human Sciences website. 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 for the M.A. programs is February 1st and for December 15th for the Ed.D. and Ph.D. programs. Admission is competitive.

Certification Requirements

The Counselor Education, M.A., School Counseling option, leads to licensure at the Class VI level. The Counselor Education M.A. for Clinical Mental Health Counseling prepares graduates for licensure candidacy as Licensed Clinical Professional Counselors (LCPC) in the state of Montana.

Educational Leadership Department < University of Montana

Educational Leadership Department

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., Principal Leadership Certificate, Superintendent Leadership Certificate, and Ed.D. are offered, along with an M.Ed. and Ph.D. in International Educational Leadership. Information regarding specific requirements and program options is available from the Phyllis J. Washington College of Education and Human Sciences website. 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) required for Doctoral admissions but not Master s Level admissions;
- 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

Educational Leadership Master s Degree and Principal Leadership or Superintendent Leadership Certificate 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 or administrative experience for the Class 3 license.

Global Youth Development Department < University of Montana

Global Youth Development Department

- Overview
- Programs

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

Undergraduate Minor

- Human and Family Development

Teaching and Learning Department < University of Montana

Teaching and Learning Department

- Overview
- Programs

Trent Atkins, Chair

The Department of Teaching and Learning 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, 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. For more information go to the Department of Teaching and Learning web site.

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,
- early childhood education,
- 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 and K-12 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 and website, UM Graduate Programs and Admissions Catalog.

Teacher Preparation

Elementary Education

Individuals preparing to teach in elementary schools (license for grades K-8) complete a major in elementary education. Students apply for admission to the Teacher Education Programs, usually at the end of the sophomore year, in order to continue with the education (EDU) sequence of courses. All elementary education majors are advised by full-time advisors within the Department of Curriculum and Instruction.

Secondary and K-12 licensure

Students preparing to teach at the middle or high school levels (license for grades 5-12) or in K-12 licensure areas will declare a major in the subject area(s) they wish to teach, e.g., English, mathematics, music, 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 or K-12 licensure. All secondary and K-12 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 website.

Master's Degree and Initial Licensure

Individuals who have completed a bachelor's 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 and K-12 licensure level, the combined program may be completed in a summer-autumn-spring-summer sequence provided the student previously has completed most of the required content courses. At the elementary licensure level, the program typically takes two academic years.

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 writing course (WRIT 101) with a grade of C- or better;
- demonstrated evidence of writing ability in an application essay;
- documented appropriate experience 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.

The Teacher Education Program Admission Application packet includes a policy and procedures handbook and can be downloaded from the website.

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, reading, 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, secondary, or K-12 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 Level of the Program, 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.

Internships and practica in library, 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 , Indians of Montana, to meet this requirement. Throughout their programs of study candidates must demonstrate

1. ability to integrate into their content areas knowledge of the history, cultural heritage, and contemporary status of American Indians and tribes in Montana;
2. knowledge of how students within different populations, including Montana American Indians, differ in their approaches to learning; and
3. ability to create instructional opportunities that are adapted to diverse learners, including situations where concentrated generational poverty has affected student academic achievement.

Undergraduate

- Elementary Education B.A.
- Early Childhood Education P-3 B.A.

Undergraduate Minors

- Early Childhood Education Minor

Undergraduate Teaching Licensures

- Teacher Library Media Licensure
- Teaching ESL Licensure
- Teaching Reading Licensure
- Teaching Special Education Licensure
- Technology in Education Licensure
- Secondary Licensure

University Of Montana

Early Childhood Education P-3 B.A.

Bachelor of Arts - Early Childhood Education P-3

Phyllis J. Washington College of Education

Degree Specific Credits: 101-102

Required Cumulative GPA: 2.75

Catalog Year: 2019-2020

Note: Admission to the Teacher Education Program is required to enroll in any EDU and EDEC courses.

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

Course List		
CODE	**TITLE**	**HOURS**
Literature Content Courses		3-4
Math Content Courses		6
Science Content Courses		13
Social Studies Content Courses		12
Geography		
Social Studies		
Health and Physical Education		3
The Arts		6
Teacher Education Program - Professional Licensure Courses		58
Level 1 - Learning and Instruction		
Level 2 - Pedagogy and Content Knowledge		
Level 3 - Pedagogy and Content Knowledge		
Level 4 - Student Teaching		
Total Hours		101-102

Literature Content Courses

Course List		
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		3-4
EDU 331	Lit & Literacy for Children	
GH 151L	Introduction to Western Humanities Antiquity	
GH 152L	Introduction to the Humanities Medieval to Modern	
LIT 110L	Intro to Lit	
LIT 120L	Poetry	
NASX 235X	Oral/Written Trads Native Amer	
Total Hours		3-4

Minimum Required Grade: C-

Math Content Courses

		Course List
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
M 132	Numbers and Operations for Elementary School Teachers	3
M 133	Geometry and Measurement for Elementary School Teachers	3
Total Hours		6

Minimum Required Grade: C-

Science Content Courses

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
BIOB 226N	Gen Science: Earth & Life Sci	5
ENST 472	Gen Sci: Conservation Education	3
PHSX 225N	Gen Science: Phys & Chem Sci	5
Total Hours		13

Minimum Required Grade: C-

Social Studies Content Courses

Rule: Complete the following subcategories. 12 total credits required.

Geography

Course List		
CODE	**TITLE**	**HOURS**
Complete the following course:		
GPHY 121S	Human Geography	3
or GPHY 141S	Geography of World Regions	
Total Hours		3

Minimum Required Grade: C-

Social Studies Courses

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
ANTY 122S	Race and Minorities	3
HSTA 255	Montana History	3
NASX 105H	Intro Native Amer Studies	3
Total Hours		9

Minimum Required Grade: C-

Health and Physical Education

Course List		
CODE	**TITLE**	**HOURS**
Complete the following course:		
HEE 302	Methods of Instructional Strategies in Elementary PE	3
Total Hours		3

Minimum Required Grade: C-

The Arts

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
ARTZ 302A	Elementary School Art	2
MUSE 397	Methods: K-8 Music	2
THTR 239A	Creative Drama/Dance: K-8	2
Total Hours		6

Minimum Required Grade: C-

Teacher Education Program - Professional Licensure Courses

Rule: Complete the following subcategories. 64 total credits required.

Level 1 - Learning and Instruction

Note: Students are required to complete EDU 397 Methods: PK-4: Early Numeracy (3 credits) and EDU 397 Methods: PK-3 Early Literacy (3 credits). All courses must be completed concurrently.

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
EDU 222	Educational Psych Child Dev	3
EDU 338	Academic Interventions	3
EDU 395	Clinical Experience	1
EDU 397	Methods: Teaching & Assessing	6
HEE 330	Promoting Well-Being in the Classroom P-12	2
Total Hours		15

Minimum Required Grade: C-

Level 2 - Pedagogy and Content Knowledge

Note: All courses must be completed concurrently.

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
EDEC 408	Early Childhood Principles and Practices	3
EDEC 410	Families, Communities, Culture	3
EDU 339	Tchg Assess PK-8 Lang Arts	3
EDU 346	Exceptionalities	3
EDU 370	IntegTech into Educ	3
EDU 395	Clinical Experience (Level 2)	1
Total Hours		16

Minimum Required Grade: C-

Level 3 - Pedagogy and Content Knowledge

Note: All courses must be completed concurrently.

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
EDU 407E	Ethics & Policy Issues	3
EDEC 420	Implementing Standards and Assessment in Play-Based Environments	3
EDEC 430	SocEmot Dvlpmnt in Yng Child	3
EDEC 453	Early Childhood STEM	3
EDEC 495	EC Fieldwork/Practicum: Integrated Curriculum	3
Total Hours		15

Minimum Required Grade: C-

Level 4 - Student Teaching

Note: All courses must be completed concurrently.

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
EDU 494	Seminar:Refl Pract & App Rsrch	1
EDU 495	Student Teaching	14
Total Hours		15

Minimum Required Grade: C-

Early Childhood Education Minor < University of Montana

Early Childhood Education Minor

Minor - Early Childhood Education

Phyllis J. Washington College of Education

Degree Specific Credits: 24

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: This minor can only be completed by individuals seeking K-8 elementary licensure or currently licensed elementary education teachers.

Summary

CODE	TITLE	HOURS
Required courses		24
Total Hours		24

Course List

Required Courses

Note: Students must take two semesters of EDU 397:

1. Methods: PK-4 Early Numeracy and
2. Methods: PK-3 Early Literacy.

CODE	TITLE	HOURS
Complete all of the following courses:		
EDEC 408	Early Childhood Principles and Practices	3
EDEC 410	Families, Communities, Culture	3
EDEC 420	Implementing Standards and Assessment in Play-Based Environments	3
EDEC 430	SocEmot Dvlpmnt in Yng Child	3
EDEC 495	EC Fieldwork/Practicum: Integrated Curriculum	3
EDU 222	Educational Psych Child Dev	3
EDU 397	Methods: Teaching & Assessing (two semesters)	6
Total Hours		24

Course List

Minimum Required Grade: C-

Elementary Education B.A. < University of Montana

Elementary Education B.A.

Bachelor of Arts - Elementary Education

Phyllis J. Washington College of Education

Degree Specific Credits: 104-105

Required Cumulative GPA: 2.75

Catalog Year: 2019-2020

Note: Admission to the Teacher Education Program is required to enroll in any EDU courses.

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

CODE	TITLE	HOURS
Language Arts Content Courses		6-7
Literature		
Children's Literature		
Science Content Courses		10
Social Studies Content Courses		16
Geography		
American History		
Other Social Studies Courses		
Health and Physical Education		6
The Arts		6
Teacher Education Program - Professional Licensure Courses		60
Level 1		
Level 2		
Level 3		
Level 4		
Total Hours		104-105

Course List

Language Arts Content Courses

Literature

Note: Other literature courses may meet this requirement. Please consult with the Education Advisor for approval.

CODE	TITLE	HOURS
Complete one of the following courses:		3-4
GH 151L	Introduction to Western Humanities Antiquity	
GH 152L	Introduction to the Humanities Medieval to Modern	
LIT 110L	Intro to Lit	
Total Hours		3-4

Course List

Minimum Required Grade: C-

Children's Literature

CODE	TITLE	HOURS
Complete the following course:		
EDU 331	Lit & Literacy for Children	3
Total Hours		3

Course List

Minimum Required Grade: C-

Science Content Courses

Note: Other science courses may meet the requirements. Please consult with the Education Advisor.

CODE	TITLE	HOURS
Complete all of the following courses:		
BIOB 226N	Gen Science: Earth & Life Sci	5
PHSX 225N	Gen Science: Phys & Chem Sci	5
Total Hours		10

Course List

Minimum Required Grade: C-

Social Studies Content Courses

Rule: Complete the following subcategories. 16 total credits required.

Geography

CODE	TITLE	HOURS
Complete one of the following courses:		
GPHY 121S	Human Geography	3
or GPHY 141S	Geography of World Regions	
Total Hours		3

Course List

Minimum Required Grade: C-

American History

Note: Other history courses may fulfill this requirement. Please consult with the Education Advisor.

CODE	TITLE	HOURS
Complete one of the following courses:		
HSTA 101H	American History I	4
or HSTA 102H	American History II	
Total Hours		4

Course List

Minimum Required Grade: C-

Other Social Studies Courses

Note: Other Native American Studies courses may fulfill the NASX 105H requirement. Please consult with the Education Advisor.

CODE	TITLE	HOURS
Complete all of the following courses:		
HSTA 255	Montana History	3
NASX 105H	Intro Native Amer Studies	3
PSCI 210S	Intro to American Government	3
Total Hours		9

Course List

Minimum Required Grade: C-

Health and Physical Education

CODE	TITLE	HOURS
Complete the following course:		
HEE 302	Methods of Instructional Strategies in Elementary PE	3
Total Hours		3

Course List

Minimum Required Grade: C-

The Arts

CODE	TITLE	HOURS
Complete all of the following courses:		
ARTZ 302A	Elementary School Art	2
MUSE 397	Methods: K-8 Music	2
THTR 239A	Creative Drama/Dance: K-8	2
Total Hours		6

Course List

Minimum Required Grade: C-

Teacher Education Program - Professional Licensure Courses

Rule: Complete the following subcategories. 60 total credits required.

Level 1

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). All courses must be completed concurrently.

CODE	TITLE	HOURS
Complete all of the following courses:		
EDU 222	Educational Psych Child Dev	3
EDU 338	Academic Interventions	3
EDU 395	Clinical Experience	1
EDU 397	Methods: Teaching & Assessing (two courses)	6
Total Hours		13

Course List

Minimum Required Grade: C-

Level 2

Note: Students are required to complete EDU 397 Methods: PK-8 Language Arts (3 credits). All courses must be completed concurrently.

CODE	TITLE	HOURS
Complete all of the following courses:		
EDU 346	Exceptionalities	3
EDU 370	IntegTech into Educ	3
EDU 395	Clinical Experience	1
EDU 397	Methods: Teaching & Assessing	3
EDU 407E	Ethics & Policy Issues	3
ENST 472	Gen Sci: Conservation Education	3
Total Hours		16

Course List

Minimum Required Grade: C-

Level 3

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).
- All courses must be completed concurrently.

CODE	TITLE	HOURS
Complete all of the following courses:		
EDU 340	Classroom Management	3
EDU 495	Student Teaching	1
EDU 497	Teaching and Assessing (complete four courses)	12
Total Hours		16

Course List

Minimum Required Grade: C-

Level 4

Note: EDU 494 is completed for 1 credit and EDU 495 is completed for 14 credits. All courses must be completed concurrently.

CODE	TITLE	HOURS
Complete all of the following courses:		
EDU 494	Seminar:Refl Pract & App Rsrch	1
EDU 495	Student Teaching	14
Total Hours		15

Course List

Minimum Required Grade: C-

Secondary Licensure < University of Montana

Secondary Licensure

- Overview
- Requirements

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 Teaching and Learning 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 or on our website at: http://www.coehs.umt.edu/

Teaching Licensure - Secondary Certification

Phyllis J. Washington College of Education

Degree Specific Credits: 38

Required Cumulative GPA: 2.75

Catalog Year: 2019-2020

Note: The Teacher Education Program coursework is completed in addition to the teaching track(s) in a major in a teaching content area 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 Teaching and Learning website for additional information regarding admission.

Summary

CODE	TITLE	HOURS
Teacher Education Program Prerequisite		3
Additional Licensure Requirements		5
Education Coursework		15
Education Field Experiences		2
Student Teaching Field Experience		15
Total Hours		40

Course List

Teacher Education Program Prerequisite

Note: This course must be completed before applying to the Teacher Education Program.

CODE	TITLE	HOURS
Complete the following course:		
WRIT 101	College Writing I	3
Total Hours		3

Course List

Minimum Required Grade: C-

Additional Licensure Requirements

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 Teaching and Learning advisor for approval.

CODE	TITLE	HOURS
Complete the following course:		
HEE 330	Promoting Well-Being in the Classroom P-12	2
NASX 105H	Intro Native Amer Studies (or any other NASX course)	3
Total Hours		5

Course List

Minimum Required Grade: C-

Education Coursework

Note: Admission to the Teacher Education Program is required to enroll in the following courses.

Notes:

- 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.

CODE	TITLE	HOURS
Complete all of the following courses:		
EDU 221	Ed Psych & Measuremnt	3
EDU 345	Excptnlty & Clsrm Mgmt	3
EDU 370	IntegTech into Educ	3
EDU 407E	Ethics & Policy Issues	3
EDU 481	Content Area Literacy	3
Total Hours		15

Course List

Minimum Required Grade: C-

Education Field Experiences

Note: Admission to the Teacher Education Program is required to enroll in the following courses. EDU 202 is a prerequisite to EDU 395. EDU 395 is taken concurrently with the content-specific methods course.

CODE	TITLE	HOURS
Complete all of the following courses:		
EDU 202	Early Field Experience	1
EDU 395	Clinical Experience	1
Total Hours		2

Course List

Minimum Required Grade: C-

Student Teaching Field Experience

Note: All content, methods, and education courses must be completed prior to enrolling in the student teaching semester. 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.

CODE	TITLE	HOURS
Complete all of the following courses:		
EDU 494	Seminar:Refl Pract & App Rsrch	1
EDU 495	Student Teaching	14
Total Hours		15

Course List

Minimum Required Grade: C-

Teaching ESL Licensure < University of Montana

Teaching ESL Licensure

- Overview
- Requirements

Those seeking licensure to teach ESL need to contact the Teaching and Learning Department. Do not fill out a major/minor form for graduation or the major/minor/concentration section of the major change form.

Teaching Licensure - Teaching ESL

Phyllis J. Washington College of Education

Degree Specific Credits: 22

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: Those seeking a K-12 endorsement in teaching ESL must have full admission to the Teacher Education Program or be a licensed teacher before applying to this specialized program.

Summary

CODE	TITLE	HOURS
Core Courses		16
Required Courses		
Core Options		
Elective Courses		6
Total Hours		22

Course List

Core Courses

Rule: Complete the following subcategories. 16 total credits required.

Required Courses

Note: LING 495 must be completed for 3 credits.

CODE	TITLE	HOURS
Complete all of the following courses:		
LING 470	Linguistic Analysis	3
LING 471	Phonetics and Phonology	3
LING 472	Syntax	3
LING 480	Tchg Engl as For Lang	3
LING 495	ESL Practicum	1
Total Hours		13

Course List

Minimum Required Grade: C-

Core Options

CODE	TITLE	HOURS
Complete one of the following courses:		
LING 477	Bilingualism	3
or LING 478	Learner Language	
Total Hours		3

Course List

Minimum Required Grade: C-

Elective Courses

Note: LING 477 or LING 478 may be taken as an Elective if not taken as a Required Course.

CODE	TITLE	HOURS
Complete all of the following courses:		6
LING 473	Language and Culture	
LING 489	Morphology	
Total Hours		6

Course List

Minimum Required Grade: C-

Secondary Teaching Licensure

Note: For endorsement to teach ESL, a student also must gain admission to the Teacher Education Program and meet all the requirements for secondary teaching licensure. For more information, see the Teaching and Learning Department.

Teaching Library Media Licensure

- Overview
- Requirements

Those seeking the Teacher Librarian endorsement need to contact the Teaching and Learning Department. Do not fill out a major/minor form for graduation or the major/minor/concentration section of the major change form.

Teaching Licensure - Teacher Librarian Endorsement

Phyllis J. Washington College of Education

Endorsement Specific Credits: 21

Required Cumulative GPA: 2.75

Catalog Year: 2019-2020

Note: This program of study can only be completed by those pursuing a teaching endorsement 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 Teaching and Learning 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.

Summary

		Course List
CODE	**TITLE**	**HOURS**
Library Media Courses		19
Library Media Practicum		2
Total Hours		21

Library Media Courses

Note: Students will complete LIBM 461 through UM-Western. Students may choose to substitute EDU 391 online through UM-Western in place of EDU 331 and EDU 432.

		Course List
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
LIBM 461	Information Literacy	3
LIBM 462	Youthi Literature for Librarians	3
LIBM 464	Reference Resources	3
LIBM 466	Libraries and Technology	3
LIBM 467	Collection and Cataloging	4
LIBM 468	Admin & Assess of Library Programs	3
Total Hours		19

Minimum Required Grade: C-

Library Media Practicum

Note: The practicum requires 60 hours in a school or public library. All library media coursework must be completed prior to enrolling in the library media practicum.

Course List		
CODE	**TITLE**	**HOURS**
Complete the following course:		
LIBM 495	Practicum	2
Total Hours		2

Minimum Required Grade: C-

Teaching Reading Licensure < University of Montana

Teaching Reading Licensure

- Overview
- Requirements

Those seeking licensure to teach reading need to contact the Teaching and Learning Department. Do not fill out a major/minor form for graduation or the major/minor/concentration section of the major change form.

Teaching Licensure - Teaching Reading

Phyllis J. Washington College of Education

Degree Specific Credits: 25

Required Cumulative GPA: 2.75

Catalog Year: 2019-2020

Note: This program of study can only be completed by those pursuing a teaching endorsement 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.

Summary

CODE	TITLE	HOURS
Reading Teaching Courses		19
Reading Teaching Practicum		6
Total Hours		25

Course List

Reading Teaching 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.

CODE	TITLE	HOURS
Complete all of the following courses:		
EDU 331	Lit & Literacy for Children	3
EDU 397	Methods: Teaching & Assessing	3
EDU 432	Lit & Literacy for Yng Adlts	3
EDU 438	Ltrcy Asmnt, Diagnosis & Instr	3
EDU 481	Content Area Literacy	3
EDU 497	Teaching and Assessing	4
Total Hours		19

Course List

Minimum Required Grade: C-

Reading Teaching Practicum

Note: All reading coursework must be complete prior to enrolling in the reading practicum.

CODE	TITLE	HOURS
Complete the following course:		
EDU 456	Applictn of Literacy Modls K12	6
Total Hours		6

Course List

Minimum Required Grade: C-

Teaching Special Education Licensure < University of Montana

Teaching Special Education Licensure

- Overview
- Requirements

Those seeking the special education endorsement need to contact the Teaching and Learning Department. Do not fill out a major/minor form for graduation or the major/minor/concentration section of the major change form.

Teaching Licensure - Teaching Special Education

Phyllis J. Washington College of Education

Degree Specific Credits: 34

Required Cumulative GPA: 3.0

Catalog Year: 2019-2020

Note: This program of study can only be completed by those pursuing a teaching endorsement 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 Teaching and Learning in the College of Education and Human Sciences for more information.

Summary

CODE	TITLE	HOURS
Early Childhood Special Education		3
Special Education Requirements		21
Special Education Student Teaching		10
Total Hours		34

Course List

Early Childhood Special Education

CODE	TITLE	HOURS
Complete one of the following courses:		
EDSP 401	Intro Early Intervention	3
or EDSP 403	Curric/Mthds Early Spec Educ	
Total Hours		3

Course List

Minimum Required Grade: B

Special Education Requirements

CODE	TITLE	HOURS
Complete all of the following course:		
EDSP 405	Assess of Students with Excep	3
EDSP 426	Intro Transition & Community	3
EDSP 454	Adv Academic Interventions	3
EDSP 456	Intro Mthds Low Incidence Dis	3
EDSP 461	Positive Behavior Supports	3
EDSP 462	Spec Ed Law, Policy, Practice	3
EDU 438	Ltrcy Asmnt, Diagnosis & Instr	3
Total Hours		21

Course List

Minimum Required Grade: B

Special Education Student Teaching

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.

CODE	TITLE	HOURS
Complete the following course:		
EDSP 495	Student Teaching: Special Educ	10
Total Hours		10

Course List

Minimum Required Grade: B

Technology in Education Licensure < University of Montana

Technology in Education Licensure

- Overview
- Requirements

Those seeking the Technology in Education endorsement need to contact the Teaching and Learning Department. Do not fill out a major/minor form for graduation or the major/minor/concentration section of the major change form.

Teaching Licensure - Technology in Education

Phyllis J. Washington College of Education

Degree Specific Credits: 21

Required Cumulative GPA: 2.75

Catalog Year: 2019-2020

Note: Technology in Education is an Area of Permissive Special Competency. Completion of these requirements 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 Teaching and Learning in the College of Education and Human Sciences for additional information.

Summary

CODE	TITLE	HOURS
Technology in Education Requirements		21
Total Hours		21

Course List

Technology in Education Requirements

Note: Equivalent courses from MSU-Bozeman, MSU-Billings and MSU-Northern may substitute. Please consult a Teaching and Learning advisor for approved courses.

CODE	TITLE	HOURS
Complete all of the following courses:		
C&I 515	Computer/Tchnlgcl Appl in Educ	3
C&I 570	Instructional Technology Found	3
C&I 571	Educ Tech Media	3
C&I 580	Dist Lrng Theory & Implem	3
C&I 581	Plng & Mgt for Tech in Edu	3
C&I 582	Ed Tech Trends & Issues	3
C&I 584	Authentic App Inst Design	3
Total Hours		21

Course List

Minimum Required Grade: C-

Alexander Blewett III School of Law < University of Montana

Alexander Blewett III School of Law

Paul Kirgis, Dean

Larry Howell, Associate Dean for Academic Affairs

Hillary Wandler, Associate Dean of Students

Eduardo R. C. Capulong, Associate Dean of Clinical and Experiential Education

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 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		HOURS
LAW 500	Civil Procedure I	3
LAW 502	Contracts	4
LAW 504	Law Fund: T&P	1
LAW 505	Law Fund: T & P	2
LAW 506	Law Fund: Research	2
LAW 508	Law Fund: Analysis	1
LAW 509	Legal Writing	3
LAW 510	Criminal Law	3
LAW 512	Torts	4
LAW 550	Property	4
	Hours	27
SECOND YEAR		
LAW 552	Federal Tax (May be taken Second or Third year)	3
LAW 554	Business Organizations	3
LAW 555	Professional Responsibility	3
LAW 556	Business Transactions	3
LAW 557	Trial Practice	2
LAW 558	Constitutional Law	4
LAW 560	Evidence	3
	Hours	21
THIRD YEAR		
LAW 600	Clinical Trng III	1-6
LAW 601	Clinical Trng IV	1-6
	Hours	0
	Total Hours	48

Plan of Study Grid

Elective Courses

(Offerings vary year to year)

CODE	TITLE	HOURS
LAW 665	Administrative Law	3
LAW 507	Global Perspectives on Law	5
LAW 511	Criminal Procedure	3

CODE	TITLE	HOURS
LAW 520	Wild Life Law	3
LAW 522	Domestic Violence	2
LAW 523	Juvenille Justice	2
LAW 524	Legislation: Law & Politics	3
LAW 525	Lawyers Values	3
LAW 533	Civil rights Litigation	2
LAW 530	Climate Change	2
LAW 538	Art & Cultural Property	2
LAW 539	International Environ Law	3
LAW 548	Tax Practice & Procedure	2
LAW 580	Corporate Tax	2
LAW 677	Environmental Law Research	1
LAW 615	Advanced Legal Research	2
LAW 617	Adv Prob Fed Indian Law	3
LAW 604	Adv Constitutional Law	3
LAW 605	Animal Law	2
LAW 607	Law and Literature	1
LAW 608	Adv Leg Res Ac Writing	2
LAW 609	UCC Article 2	2
LAW 613	Nat Res Conflict Resolution	3
LAW 614	Alt Dispute Resolution	3
LAW 616	Appellate Advocacy	3
LAW 618	Montana Constitut Law	3
LAW 619	Amer Ind Natural Res Law	3
LAW 621	Bankruptcy	3
LAW 622	Employment Law	3
LAW 624	Insurance Law	3
LAW 625	Gender and the Law	1
LAW 628	Remedies	3
LAW 630	Lawyers' Values	3
LAW 631	Law Practice	2
LAW 634	Public International Law	3

CODE	TITLE	HOURS
LAW 635	Partnership Tax	2
LAW 637	Healthcare Law	2
LAW 639	Tax of Business Entities	3
LAW 640	Tax of Property Transact	2
LAW 641	Negotiations	2
LAW 643	Am Ind Cult Religion Freedom	3
LAW 644	White Collar Crime	3
LAW 646	State and Local Government	3
LAW 648	Federal Indian Law	3
LAW 650	Intro Envirolaw	3
LAW 651	Oil and Gas Law	3
LAW 653	Conflict of Laws	2
LAW 654	Public Land & Res Law	3
LAW 655	Taxation of Estates & Gifts	3
LAW 656	Agricultural Law	2
LAW 657	Products Liability	3
LAW 658	Real Estate Transactions	2
LAW 659	Estate Planning	3
LAW 663	Water Law	3
LAW 664	Philosophy of Law	3
LAW 669	Family Law	3
LAW 670	Child Advocacy	2
LAW 671	Federal Courts	2
LAW 672	Alt Dispute Resol Fam Med	3
LAW 678	Renewable Energy	3
LAW 682	Copyright/Trademark Laws	2
LAW 687	Land Use Planning Law	3
LAW 688	Tribal Courts/Tribal Law	3
LAW 691	Indian Child Welfare	1

Course List

Department of Public Administration and Policy < University of Montana

Department of Public Administration and Policy

- Overview
- Programs

Sara Rinfret, Director

The University of Montana s Department of Public Administration and Policy is the first of its kind in Montana. The mission of the department is to provide a cutting edge public sector education for our students from high-quality faculty committed to applied research and teaching. Our department offers a variety of degrees: Master of Public Administration, certificates in public policy, nonprofit administration, and public administration, and an undergraduate minor in nonprofit administration. Our department is centrally located within the Alexander Blewett III School of Law s Max S. Baucus Institute. Our faculty offer coursework online, in-person, and via robot.

Undergraduate Minors

Nonprofit Administration Minor

Nonprofit Administration Minor < University of Montana

Nonprofit Administration Minor

Minor - Nonprofit Administration

Alexander Blewett III School of Law

Degree Specific Credits: 21

Required Cumulative GPA: 2.5

Catalog Year: 2019-2020

Summary

CODE	TITLE	HOURS
Upper-Division Core Courses		9
Required Courses		
Internship		
Minor Elective Courses		12
Communication Skills		
Youth and Adult Development		
Human Resources Development and Supervision		
Nonprofit Program Planning		
Nonprofit Marketing		
Nonprofit Accounting/Financial Management		
Total Hours		21

Course List

Upper-Division Core Courses

Rule: Complete the following subcategories. 9 total credits required.

Required Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
NPAD 466	Nonprofit Adm & Pub Svc	3
NPAD 467	Advanced Nonprofit Admin	3
Total Hours		6

Course List

Minimum Required Grade: C-

Internship

CODE	TITLE	HOURS
Complete the following course:		
NPAD 498	Internship	3
Total Hours		3

Course List

Minimum Required Grade: C-

Degree Elective Courses

Rule: Complete 12 credits from at least 4 of the following 6 areas. 12 total credits required.

Communication Skills

CODE	TITLE	HOURS
Complete one of the following courses:		3
BMGT 420	Leadership and Motivation	
COMX 115S	Introduction to Interpersonal Communications	
COMX 210	Communication in Small Groups	
COMX 415	Intercultural Communication	
COMX 421	Communication in Nonprofit Organizations	
COMX 422	Communication and Technology	
COMX 423	Organizational Communication Consulting and Training	
COMX 424	Risk, Crisis, and Communication	
Total Hours		3

Course List

Minimum Required Grade: C-

Youth and Adult Development

CODE	TITLE	HOURS
Complete one of the following courses:		3
PSYX 230	Developmental Psychology	
PSYX 233	Fund of Psychology of Aging	
SOCI 260S	Introduction to Juvenile Delinquency	
SOCI 335	Juvenile Justice System	
Total Hours		3

Course List

Minimum Required Grade: C-

Human Resources Development and Supervision

CODE	TITLE	HOURS
Complete one of the following courses:		3
COMX 220S	Introduction to Organizational Communication	
PSCI 462	Human Resource Management	
PTRM 380	Rec Admin & Leadership	
Total Hours		3

Course List

Minimum Required Grade: C-

Nonprofit Program Planning

CODE	TITLE	HOURS
Complete the following course:		
PTRM 485	Recreation Planning	3
Total Hours		3

Course List

Minimum Required Grade: C-

Nonprofit Marketing

CODE	TITLE	HOURS
Complete one of the following courses:		
BMKT 343	Integrated Marketing Comm	3
or BMKT 412	Non Profit Marketing	
Total Hours		3

Course List

Minimum Required Grade: C-

Nonprofit Accounting/Financial Management

CODE	TITLE	HOURS
Complete the following course:		
ACTG 201	Principles of Financial Accounting	3
Total Hours		3

Course List

Minimum Required Grade: C-

The Maureen and Mike Mansfield Library < University of Montana

The Maureen and Mike Mansfield Library

Barry Brown, Interim 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 teaching, learning, and research programs of the University. These resources include print collections and access to networked research databases, electronic journals e-books, media materials, and a web-based integrated library cataloging and discovery platform. Library services include in-depth research and reference assistance, an extensive instruction program integrated into the university curriculum, and full-service computing and media facilities. Extensive services for online 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 volumes, more than 800,000 electronic books, access to over 75,000 print and electronic journals, an expanding array of electronic databases, over 72,000 media, a federal government depository collection and an Archives and Special Collections. These resources are supplemented by an active interlibrary loan service through which items from other libraries can be loaned to UM students and faculty. The Mansfield Library is open seven days a week for 111 hours per week during the academic semesters.

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 instructional 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's 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.

W.A Franke College of Forestry and Conservation

Tom DeLuca, Dean

Mike Patterson, Associate Dean

The undergraduate curricular programs at the W.A Franke College of Forestry and Conservation (FCFC) 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 W.A Franke 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 six undergraduate majors in the College are:

- Forestry
- Geography
- Parks, Tourism, and Recreation Management
- Wildlife Biology
- Resource Conservation
- Ecosystem Science and 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 W.A Franke College of Forestry and Conservation

Students planning to enter the W.A Franke 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 catalog. Resident transfer students or current UM students wanting to change their major to the W.A Franke College of Forestry and Conservation must have a grade point average of 2.0 or higher to be admitted.

Educational Framework at the W.A Franke College of Forestry and Conservation

Students at the W.A Franke 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 Ecosystem Science and 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); Careers in Natural Resources (WILD 180) or Wildlife and People (WILD 105N). 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 W.A Franke College of Forestry and Conservation is the proximity of an unlimited field laboratory in both the managed and untrammeled landscapes of Montana. All undergraduates will have multiple opportunities to learn in field settings as a part of lab sections associated with many of FCFC'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. W.A Franke 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. 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).

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 W.A Franke 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 FCFC also fulfill the categories within general education requirements. All FCFC 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 W.A Franke 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.

Ecosystem Science and Restoration < University of Montana

Ecosystem Science and Restoration

- Overview
- Programs

Lisa Eby, Director

Bachelor of Science in Ecosystem Science and Restoration

This exciting program spans ecology from microbial to global scales and includes basic and applied science. As an ESR major, you can focus on either aquatic or terrestrial ecosystems and tailor your experience to best fit your interests and start a career in as ecologists, botanists, watershed hydrologists, or restoration practitioners with non-profit, private, or governmental agencies and for graduate school in ecology or natural resource management. The W.A Franke College of Forestry and Conservation offers a Bachelor of Science in Ecosystem Science and Restoration and a minor in Ecological Restoration. For more information see the Ecosystem Science and Restoration website.

Degree Concentrations

Bachelor of Science in Ecosystem Science and Restoration (Aquatic and Terrestrial Concentrations)

The major in Ecosystem Science and Restoration prepares students to understand how ecosystems work and tackle the complex challenges associated with repairing degraded ecosystems. Students select one of two concentrations:

- the *Terrestrial Concentration*, which focuses on restoration of forests, grasslands, and other terrestrial ecosystems; or
- the *Aquatic Concentration* which focuses on stream, river, lake, or wetland restoration.

Both concentrations provide in-depth training in how ecosystems function, the science of restoration ecology and the management activities, as well as, an introduction to the policy and human dimensions of natural resource management and restoration practice. Students engage in field-based learning, contribute to cutting-edge restoration projects, and are challenged to apply ecological theory to research projects and restoration practice.

A degree in Ecosystem Science and Restoration prepares students for careers as ecologists or 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 can be found on the federal civil service requirements website.

Minor in Ecological Restoration

In addition to the major, the Ecosystem Science and Restoration program also offers a minor for students who wish to gain basic competency in restoration while pursuing another UM major.

Undergraduate

- Ecological Sciences & Restoration B.S., Aquatic Ecosystem Sciences and Restoration Concentration
- Ecological Sciences & Restoration B.S., Terrestrial Ecosystem Sciences and Restoration Concentration

Undergraduate Minors

- Ecological Restoration

Ecosystem Science and Restoration - Aquatic < University of Montana

Ecosystem Science and Restoration - Aquatic

- Overview
- Requirements

The major in Ecosystem Science and Restoration prepares students to understand how ecosystems work to solve pressing environmental problems or help restore degraded ecosystems. Students can select one of two options:

- the terrestrial concentration, which focuses on the understanding and repair of terrestrial ecosystems; and
- the aquatic concentration, which focuses on aquatic ecosystem function and watershed restoration.

Students engage in field-based learning, contribute to cutting-edge restoration or ecosystem science projects, and are challenged to apply ecological theory to research and restoration practice. The major requires completion of a nine-credit restoration capstone, during which students gain hands-on real-world experience planning and implementing research or restoration projects in partnership with natural resource management agencies and organizations in western Montana.

A degree in Ecosystem Science and Restoration prepares students for careers as ecologists or 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 - Ecosystem Science & Restoration; Aquatic Concentration

W.A Franke College of Forestry & Conservation

Degree Specific Credits: 94-95

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

CODE	TITLE	HOURS
Lower-Division Major Required Courses		6
Lower-Division Outside Major Required Courses		26-27
Upper-Division Major Required Courses		21
Upper-Division Outside Major Required Courses		3
Aquatic Restoration Concentration Required Courses		17
Aquatic Restoration Concentration Electives		9
Social Science Elective Courses		3
Upper-Division Writing Requirement		9
Total Hours		94-95

Course List

Lower-Division Major Required Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
NRSM 121S	Nature of Montana	3
or NRSM 170	International Envir. Change	
NRSM 265	Elements of Ecological Restoration	3
Total Hours		6

Course List

Minimum Required Grade: C-

Lower-Division Outside Major Required Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
BIOB 160N	Principles of Living Systems	3
BIOB 161N	Prncpls of Living Systems Lab	1
BIOB 260	Cellular and Molecular Biology	4
BIOB 272	Genetics and Evolution	4
CHMY 121N	Introduction to General Chemistry	4
CHMY 123	Introduction to Organic and Biochemistry	4
COMX 111A	Introduction to Public Speaking	3
or THTR 120A	Introduction to Acting I	
Complete one of the following courses:		3-4
STAT 216	Introduction to Statistics	
FORS 201	Forest Biometrics	
WILD 240	Intro to Biostatistics	
Total Hours		26-27

Course List

Minimum Required Grade: C-

Upper-Division Major Required Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
NRSM 344	Ecosystem Science and Restoration Capstone	5
NRSM 385	Watershed Hydrology	3
NRSM 422	Nat Res Policy/Administration	3
NRSM 465	Foundations of Restoration Ecology	3
or BIOE 447	Ecosystem Ecology	
NRSM 389E	Ethics Forestry & Conservation	3
or NRSM 349E	Climate Change Ethics/Policy	
NRSM 494	Ecosystem Science and Restoration Seminar	1
Complete one of the following courses:		3
NRSM 495	Ecosystem Science and Restoration Practicum	
NRSM 498	Internship (ESR Capstone Internship Experience)	
NRSM 499	Senior Thesis	
Total Hours		21

Course List

Minimum Required Grade: C-

Upper-Division Outside Major Required Courses

CODE	TITLE	HOURS
Complete the following course:		
BIOE 370	General Ecology	3
Total Hours		3

Course List

Minimum Required Grade: C-

Aquatic Restoration Concentration Required Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
BIOE 428	Freshwater Ecology	5
GEO 101N	Introduction to Physical Geology	3
GEO 102N	Introduction to Physical Geology Lab	1
M 171	Calculus I	4
M 172	Calculus II	4
Total Hours		17

Course List

Minimum Required Grade: C-

Aquatic Restoration Concentration Electives

Note: No double-dipping with core courses is allowed.

CODE	TITLE	HOURS
Complete 9 credits from the following courses:		9
BIOE 342	Field Ecology	
BIOE 439	Stream Ecology	
BIOE 447	Ecosystem Ecology	
BIOE 451	Landscape Ecology	
BIOE 453	Ecology of Small & Large Lakes	
BIOO 340	Biology and Mgmnt of Fishes	
FORS 250	Intro to GIS for Forest Mgt	
GEO 318	Climate System Dynamics	
GEO 420	Hydrogeology	
GEO 421	Hydrology	
GEO 460	Process Geomorphology	
GPHY 284	Intro to GIS and Cartography	
NRSM 210N	Soils, Water and Climate	
NRSM 408	Global Cycles and Climate	
NRSM 418	Ecosystem Climatology	
NRSM 465	Foundations of Restoration Ecology	
WILD 485	Aquatic Invertebrate Ecology	
Total Hours		9

Course List

Minimum Required Grade: C-

Social Science Elective Courses

CODE	TITLE	HOURS
Complete one of the following courses:		3
ECNS 433	Economics of the Environment	
FORS 320	Forest Environmental Economics	
GPHY 335	Water Policy	
NRSM 379	Collab in Nat Res Decisions	
NRSM 426	Climate and Society	
NRSM 427	Advanced Water Policy	
NRSM 475	Environment & Development	
Total Hours		3

Course List

Minimum Required Grade: C-

Upper Division Writing Requirement

CODE	TITLE	HOURS
Complete three of the following courses:		9
BIOE 428	Freshwater Ecology	
FORS 330	Forest Ecology	
NRSM 344	Ecosystem Science and Restoration Capstone	
NRSM 379	Collab in Nat Res Decisions	
NRSM 465	Foundations of Restoration Ecology	
NRSM 495	Ecosystem Science and Restoration Practicum	
NRSM 499	Senior Thesis	
Total Hours		9

Course List

Minimum Required Grade: C-

Ecosystem Science and Restoration - Terrestrial

- Overview
- Requirements

The major in Ecosystem Science and Restoration prepares students to understand how ecosystems work to solve pressing environmental problems or help restore degraded ecosystems. Students can select one of two options:

- the terrestrial concentration, which focuses on the understanding and repair of terrestrial ecosystems; and
- the aquatic concentration, which focuses on aquatic ecosystem function and watershed restoration.

Students engage in field-based learning, contribute to cutting-edge restoration or ecosystem science projects, and are challenged to apply ecological theory to research projects and restoration practice. The major requires completion of a nine-credit restoration capstone, during which students gain hands-on real-world experience planning and implementing research or restoration projects in partnership with natural resource management agencies and organizations in western Montana.

A degree in Ecosystem Science and Restoration prepares students for careers as ecologists or 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: https://www.opm.gov/policy-data-oversight/classification-qualifications/general-schedule-qualification-standards/#url=List-by-Title.

Bachelor of Science - Ecosystem Science & Restoration; Terrestrial Concentration

W.A Franke College of Forestry & Conservation

Degree Specific Credits: 93-95

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

Course List		
CODE	**TITLE**	**HOURS**
Lower-Division Major Required Courses		6
Lower-Division Outside Major Required Courses		26-27
Upper-Division Major Required Courses		21
Upper-Division Outside Major Required Courses		3
Terrestrial Restoration Concentration Required Courses		16-17
Terrestrial Restoration Concentration Electives		9
Social Science Elective Courses		3
Upper-Division Writing Requirement		9
Total Hours		93-95

Lower-Division Major Required Courses

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
NRSM 121S	Nature of Montana	3
or NRSM 170	International Envir. Change	
NRSM 265	Elements of Ecological Restoration	3
Total Hours		6

Minimum Required Grade: C-

Lower-Division Outside Major Required Courses

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
BIOB 160N	Principles of Living Systems	3
BIOB 161N	Prncpls of Living Systems Lab	1
BIOB 260	Cellular and Molecular Biology	4
BIOB 272	Genetics and Evolution	4
CHMY 121N	Introduction to General Chemistry	4
CHMY 123	Introduction to Organic and Biochemistry	4
COMX 111A	Introduction to Public Speaking	3
or THTR 120A	Introduction to Acting I	
Complete one of the following courses:		3-4
STAT 216	Introduction to Statistics	
FORS 201	Forest Biometrics	
WILD 240	Intro to Biostatistics	
Total Hours		26-27

Minimum Required Grade: C-

Upper-Division Major Required Courses

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
NRSM 344	Ecosystem Science and Restoration Capstone	5
NRSM 385	Watershed Hydrology	3
NRSM 389E	Ethics Forestry & Conservation	3
or NRSM 349E	Climate Change Ethics/Policy	
NRSM 422	Nat Res Policy/Administration	3
NRSM 465	Foundations of Restoration Ecology	3
or BIOE 447	Ecosystem Ecology	
NRSM 494	Ecosystem Science and Restoration Seminar	1
Complete one of the following courses:		3
NRSM 495	Ecosystem Science and Restoration Practicum	
NRSM 498	Internship (ESR Capstone Internship Experience)	
NRSM 499	Senior Thesis	
Total Hours		21

Minimum Required Grade: C-

Upper-Division Outside Major Required Courses

Course List		
CODE	**TITLE**	**HOURS**
Complete the following course:		
BIOE 370	General Ecology	3
Total Hours		3

Minimum Required Grade: C-

Terrestrial Restoration Concentration Required Courses

		Course List
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
BIOO 105N	Introduction to Botany	3
BIOO 335	Rocky Mountain Flora	3
M 162	Applied Calculus	4
NRSM 210N	Soils, Water and Climate	3
Complete one of the following courses:		3-4
BIOE 448	Terrestrial Plant Ecology	
FORS 330	Forest Ecology	
NRSM 462	Rangeland Ecology	
Total Hours		16-17

Minimum Required Grade: C-

Terrestrial Restoration Concentration Electives

Note: No double dipping is allowed with core courses.

Course List		
CODE	**TITLE**	**HOURS**
Complete 9 credits of the following courses:		9
BIOE 342	Field Ecology	
BIOE 416	Alpine Ecology	
BIOE 447	Ecosystem Ecology	
BIOE 448	Terrestrial Plant Ecology	
BIOE 451	Landscape Ecology	
BIOE 458	Forest and Grassland Ecol	
BIOO 320	General Botany	
BIOO 433	Plant Physiology	
FORS 202	Forest Mensuration	
FORS 250	Intro to GIS for Forest Mgt	
FORS 330	Forest Ecology	
FORS 331	Wildland Fuel Management	
FORS 333	Fire Ecology	
FORS 347	Multiple Resource Silviculture	
GEO 318	Climate System Dynamics	
NRSM 360	Rangeland Mgt (equiv 260)	
NRSM 408	Global Cycles and Climate	
NRSM 415	Environmental Soil Science	
NRSM 418	Ecosystem Climatology	
NRSM 465	Foundations of Restoration Ecology	
NRSM 462	Rangeland Ecology	
WILD 470	Conserv of Wildlife Populatns	
Total Hours		9

Minimum Required Grade: C-

Social Science Elective Courses

Course List		
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		3
ECNS 433	Economics of the Environment	
FORS 320	Forest Environmental Economics	
NRSM 379	Collab in Nat Res Decisions	
NRSM 426	Climate and Society	
NRSM 427	Advanced Water Policy	
NRSM 475	Environment & Development	
Total Hours		3

Minimum Required Grade: C-

Upper-Division Writing Requirement

Course List		
CODE	**TITLE**	**HOURS**
Complete three of the following courses:		9
BIOE 428	Freshwater Ecology	
FORS 330	Forest Ecology	
NRSM 344	Ecosystem Science and Restoration Capstone	
NRSM 379	Collab in Nat Res Decisions	
NRSM 465	Foundations of Restoration Ecology	
NRSM 495	Ecosystem Science and Restoration Practicum	
NRSM 499	Senior Thesis	
Total Hours		9

Minimum Required Grade: C-

Ecological Restoration Minor < University of Montana

Ecological Restoration Minor

Minor - Ecological Restoration

W.A Franke College of Forestry & Conservation

Degree Specific Credits: 24-29

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Summary

CODE	TITLE	HOURS
Lower-Division Required Courses		9-10
Upper-Division Required Courses		9-11
Natural Science Electives		3-5
Social Science Electives		3
Total Hours		24-29

Course List

Lower-Division Required Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
NRSM 210N	Soils, Water and Climate	3
NRSM 265	Elements of Ecological Restoration	3
Complete one of the following courses:		3-4
FORS 201	Forest Biometrics	
STAT 216	Introduction to Statistics	
WILD 240	Intro to Biostatistics	
Total Hours		9-10

Course List

Minimum Required Grade: C-

Upper-Division Required Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
NRSM 385	Watershed Hydrology	3
or BIOO 335	Rocky Mountain Flora	
NRSM 465	Foundations of Restoration Ecology	3
Complete one of the following courses:		3-5
FORS 330	Forest Ecology	
BIOE 370	General Ecology	
BIOE 428	Freshwater Ecology	
NRSM 462	Rangeland Ecology	
Total Hours		9-11

Course List

Minimum Required Grade: C-

Natural Science Electives

Rule: Complete one of the following courses, but not a course already used for a core or above requirement.

CODE	TITLE	HOURS
Complete one of the following courses:		3-5
BIOE 342	Field Ecology	
BIOE 370	General Ecology	
BIOE 416	Alpine Ecology	
BIOE 428	Freshwater Ecology	
BIOE 439	Stream Ecology	
BIOE 448	Terrestrial Plant Ecology	
BIOE 451	Landscape Ecology	
BIOE 453	Ecology of Small & Large Lakes	
BIOE 458	Forest and Grassland Ecol	
BIOO 335	Rocky Mountain Flora	
BIOO 340	Biology and Mgmnt of Fishes	
BIOO 433	Plant Physiology	
FORS 202	Forest Mensuration	
FORS 330	Forest Ecology	
FORS 331	Wildland Fuel Management	
FORS 333	Fire Ecology	
FORS 347	Multiple Resource Silviculture	
GEO 420	Hydrogeology	
GEO 460	Process Geomorphology	
NRSM 385	Watershed Hydrology	
NRSM 408	Global Cycles and Climate	
NRSM 415	Environmental Soil Science	
NRSM 418	Ecosystem Climatology	
NRSM 455	Riparian Ecology & Management	
NRSM 462	Rangeland Ecology	
WILD 470	Conserv of Wildlife Populatns	
WILD 485	Aquatic Invertebrate Ecology	
Total Hours		3-5

Course List

Minimum Required Grade: C-

Social Science Electives

Rule: Complete one course from the following, but if one of these courses are required for the major a second elective must be taken.

CODE	TITLE	HOURS
Complete one of the following courses:		3
ECNS 433	Economics of the Environment	
FORS 320	Forest Environmental Economics	
GPHY 335	Water Policy	
NRSM 349E	Climate Change Ethics/Policy	
NRSM 379	Collab in Nat Res Decisions	
NRSM 422	Nat Res Policy/Administration	
NRSM 426	Climate and Society	
NRSM 475	Environment & Development	
NRSM 389E	Ethics Forestry & Conservation	
PTRM 482	Wilderness & Protected Area Management	
Total Hours		3

Course List

Minimum Required Grade: C-

Forestry B.S. < University of Montana

Forestry B.S.

- Overview
- Requirements

David Affleck, Chair

The B.S. in Forestry prepares students to be leaders in the stewardship of forest resources, from water to wildlife to wood products. Through field and classroom experiences, students gain expertise in the core biophysical and ecological processes that shape forested landscapes, and synthesize this knowledge with socio-economic principles to effectively manage, conserve, and restore natural resources.

The program uses the unique natural settings offered in Montana to give students classroom and field learning experiences with skills-based courses, independent studies, internships and research projects that lead to diverse employment opportunities.

With a degree in Forestry students can work as forest ecologists, silviculturalists, timber managers, forest planners, wildland fire specialists, inventory managers, forest rangers, or as range or soil conservationists. The Forestry degree is accredited by the Society of American Foresters and meets the requirements for qualification as Forester for the U.S. Civil Service Commission (440 series). This means student can work as a forester for federal agencies such as the U.S. Forest Service, Bureau of Land Management, Bureau of Indian Affairs as well as for many state agencies and with private industry. View more information on civil service requirements.

Bachelor of Science - Forestry

W.A Franke College of Forestry & Conservation

Degree Specific Credits: 91-96

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

CODE	TITLE	HOURS
Lower-Division Major Required Courses		14
Lower-Division Outside Major Required Courses		27-31
Upper-Division Major Required Courses		27
Professional Electives		14-15
Upper-Division Writing Requirement		9
Total Hours		91-96

Course List

Lower-Division Major Required Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
FORS 130	Intro Forestry Field Skills	2
FORS 202	Forest Mensuration	3
FORS 241N	Dendrology	3
FORS 250	Intro to GIS for Forest Mgt	3
NRSM 210N	Soils, Water and Climate	3
Total Hours		14

Course List

Minimum Required Grade: C-

Lower-Division Outside Major Required Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
BIOO 105N	Introduction to Botany	3
BIOB 160N	Principles of Living Systems	3
CHMY 121N	Introduction to General Chemistry	4
COMX 111A	Introduction to Public Speaking	3
or THTR 120A	Introduction to Acting I	
ECNS 201S	Principles of Microeconomics	3
Complete one of the following two options:		4-6
M 151	Precalculus	
M 121 & M 122	College Algebra and College Trigonometry	
Complete one of the following two options:		4-5
M 162	Applied Calculus	
PHSX 205N & PHSX 206N	College Physics I and College Physics I Laboratory	
Complete one of the following courses:		3-4
FORS 201	Forest Biometrics	
STAT 216	Introduction to Statistics	
Total Hours		27-31

Course List

Minimum Required Grade: C-

Upper-Division Major Required Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
FORS 320	Forest Environmental Economics	3
FORS 330	Forest Ecology	3
FORS 340	Forest Product Manufacturing	3
FORS 341	Timber Harvesting & Roads	3
FORS 349	Practice of Silviculture	3
FORS 440	Forest Stand Management	3
FORS 481	Forest Planning	3
NRSM 385	Watershed Hydrology	3
NRSM 422	Nat Res Policy/Administration	3
Total Hours		27

Course List

Minimum Required Grade: C-

Professional Electives

Rule: Complete 18 total credits from the combined subcategories.

Biophysical Sciences

CODE	TITLE	HOURS
Complete one of the following courses:		3
BIOE 370	General Ecology	
BIOO 335	Rocky Mountain Flora	
BIOO 433	Plant Physiology	
FORS 333	Fire Ecology	
FORS 342	Wood Anatomy, Properties, & ID	
NRSM 418	Ecosystem Climatology	
WILD 370	Wildlife Habitat Cons & Mgmt	
Total Hours		3

Course List

Minimum Required Grade: C-

Management Application

CODE	TITLE	HOURS
Complete two of the following courses:		5-6
FORS 230	Fire Management & Environmental Change	
FORS 232	Forest Insects & Diseases	
FORS 331	Wildland Fuel Management	
FORS 434	Advanced Forest Roads	
FORS 435	Advaced Timber Harvesting	
NRSM 265	Elements of Ecological Restoration	
NRSM 360	Rangeland Mgt (equiv 260)	
Total Hours		5-6

Course List

Minimum Required Grade: C-

Policy and Social Science

CODE	TITLE	HOURS
Complete one of the following courses:		3
ENST 225S	Sustainable Communities	
ENST 230H	Nature and Society	
NASX 303E	Ecological Perspectives in Native American Traditions	
NRSM 370S	Wildland Conservation Policy/Governance	
NRSM 379	Collab in Nat Res Decisions	
NRSM 389E	Ethics Forestry & Conservation	
NRSM 424	Community Forestry & Conservtn	
NRSM 426	Climate and Society	
NRSM 427	Advanced Water Policy	
NRSM 475	Environment & Development	
PTRM 217S	Parks & Outdoor Rec. Mgmt.	
PTRM 300	Recreation Behavior	
PTRM 310	Nat Res Interp and Comm	
PTRM 380	Rec Admin & Leadership	
PTRM 451	Tourism & Sustainability	
PTRM 482	Wilderness & Protected Area Management	
Total Hours		3

Course List

Minimum Required Grade: C-

Measurement and Analysis

CODE	TITLE	HOURS
Complete one of the following courses:		3
FORS 350	Forestry Apps of GIS	
FORS 351	Env Remote Sensing	
FORS 505	Sampling Methods	
GEO 421	Hydrology	
Total Hours		3

Course List

Minimum Required Grade: C-

Upper-Division Writing Requirement

CODE	TITLE	HOURS
Complete three of the following courses:		9
FORS 330	Forest Ecology	
FORS 341	Timber Harvesting & Roads	
FORS 349	Practice of Silviculture	
FORS 440	Forest Stand Management	
Total Hours		9

Course List

Minimum Required Grade: C-

Geography

David Shively, Chair

Whether global climate change or local land use change geography provides an understanding of complex natural, social, and human-environmental processes at different geographic scales. Drawing on and expanding the knowledge base of Natural Sciences, Social Sciences, and Geographic Information Sciences, we focus on

- Community and Environmental Planning, and
- Geographic Information Systems.

Our graduates are successful in occupying meaningful and challenging positions in public, private, and non-profit sectors. Their contributions speak to the impacts geographers have in analyzing, understanding, and shaping our natural and human landscapes for the benefit of future generations.

The Department of Geography offers the Bachelor of Arts, Bachelor of Science, and Master of Science degrees in Geography. For a B.A. in Geography, a concentration in Community and Environmental Planning is available. For a B.S. in Geography a concentration in Physical Geography is available. Also offered are a minor in Geography and a teaching major and minor in Geography. Several interdisciplinary minors that include coursework in Geography are available to students as well:

- a minor in Climate Change Studies,
- a minor in International Development Studies, and
- a minor in Global Public Health

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.

Undergraduate

- Geography B.A.
- Geography B.A., Community & Environmental Planning Concentration
- Geography B.S.
- Geography B.S., Physical Geography Concentration

Undergraduate Minors

- Geography Minor

Undergraduate Certificates

- Geographic Information Systems Certificate

Geography B.A.

The general geography B.A. degree (without concentration) is very flexible. In addition to meeting the core requirements for all geography majors, students may choose electives in geography (minimum 17, maximum 31 elective credits) from the fields of regional geography, geographic methods and techniques, or systematic geography (physical geography, human-environment interaction, or geography and society).

Bachelor of Arts - Geography

W.A. Franke College of Forestry and Conservation

Degree Specific Credits: 36

Required Cumulative GPA: 2.5

Catalog Year: 2019-2020

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

Course List		
CODE	**TITLE**	**HOURS**
Introduction to Geography		7
Regional Geography Course		3
Geographic Methods		6
Upper-Division Systematic Geography		9
Physical Geography		
Geography and Society		
Human Environment Interaction		
Capstone		1
Upper-Division Writing		3
Degree Electives		7
Mathematics Requirement		
Teaching Geography Track		
Total Hours		36

Introduction to Geography

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
GPHY 111N	Intro to Physical Geography	3
GPHY 112N	Intro to Phys Geography Lab	1
GPHY 121S	Human Geography	3
Total Hours		7

Minimum Required Grade: C-

Regional Geography Course

Course List		
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		3
GPHY 141S	Geography of World Regions	
GPHY 144	Glacier National Park in Winter	
GPHY 241	Montana	
GPHY 245X	The Middle East	
GPHY 342	North America	
GPHY 344	Crown of the Continent	
GPHY 347	Regional Geography (Multiple Regions)	
GPHY 348	Field Studies in Geography	
GPHY 444	High Asia	
Total Hours		3

Minimum Required Grade: C-

Geographic Methods

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
GPHY 284	Intro to GIS and Cartography	3
GPHY 385	Field Techniques	3
Total Hours		6

Minimum Required Grade: C-

Upper-Division Systematic Geography

Rule: Complete the following subcategories. 9 total credits required.

Physical Geography

Course List		
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		3
ERTH 303N	Weather and Climate	
GPHY 311N	Biogeography	
GPHY 314	Global Mountain Environments	
GPHY 317	Geomorphology	
GPHY 438	Mountain Field Study	
GPHY 525	Advanced Physical Geography	
Total Hours		3

Minimum Required Grade: C-

Geography and Society

Course List		
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		3
GPHY 323S	Economic Geography of Rural Areas	
GPHY 421	Sustainable Cities	
GPHY 434	Food and Famine	
Total Hours		3

Minimum Required Grade: C-

Human Environment Interaction

Course List		
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		3
GPHY 335	Water Policy	
GPHY 338	Mountains and Society	
GPHY 432	Human Role Environmental Change	
GPHY 433	Community Resilience	
Total Hours		3

Minimum Required Grade: C-

Capstone

Note: Seniors graduating in spring or summer must enroll in GPHY 400 in fall, attend GPHY 500 in fall, and complete course requirements in spring. Seniors graduating in fall must enroll in fall and complete course requirements in fall.

Course List		
CODE	**TITLE**	**HOURS**
Complete the following course:		
GPHY 400	Geography Capstone	1
Total Hours		1

Minimum Required Grade: C-

Upper-Division Writing

Note: GPHY 335 or GPHY 433 will also count toward the upper division core requirements GPHY 499 will also count toward upper division elective credits.

Course List		
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		3
GPHY 335	Water Policy	
GPHY 433	Community Resilience	
GPHY 499	Senior Thesis	
Total Hours		3

Minimum Required Grade: C-

Degree Electives

Note: Students must fulfill the degree credit total of 36 credits plus the university requirement for 39 upper division credits.

Course List		
CODE	**TITLE**	**HOURS**
Complete 7 credits of GPHY electives.		7

Minimum Required Grade: C-

Mathematics Requirement

Note: Students are encouraged to take M 115. Students who successfully complete M 122, M 171, or M 172 also meet the degree specific Mathematics requirement. This requirement does not count towards degree credits.

Course List		
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		3
M 115	Probability and Linear Mathematics	
M 121	College Algebra	
M 151	Precalculus	
M 162	Applied Calculus	
Total Hours		3

Minimum Required Grade: C-

Teaching Geography Track

Notes:

- This teaching track contains different/additional course requirements designed to meet state standards. Those interested in teaching in K-12 schools must complete the teaching track of a major in a teaching content area plus the Teacher Education Program through the Department of Teaching and Learning. Additional teaching areas can be added through completion of the teaching track of a major or minor in that content area.
  - Secondary Education Licensure Program
  - Licensure Degree Requirements
- To complete this teaching track, you need to contact the Teaching and Learning Department. You do not fill out a major/minor form for graduation or the major/minor/concentration section of the major change form. Approvals for this track must come from the Teaching and Learning Department.
- Tracks will not appear on your UM transcript, diploma, university lists, student data system, or university publications. They are used for advising purposes only. You do not fill out a major change for a track.
- This major does not qualify as a single field endorsement. Individuals must complete the teaching track in a second major or minor in another teaching content area.

Teaching Geography Track Required Courses

Note: The EDU 497 course number is used for multiple courses. Students should register for EDU 497 Methods: 5-12 Social Studies.

Course List		
CODE	**TITLE**	**HOURS**
Complete the following course.		4
EDU 497	Teaching and Assessing	
Total Hours		4

Minimum Required Grade: C-

Secondary Teaching Licensure

Note: For endorsement to teach geography, a student also must gain admission to the Teacher Education Program and meet all the requirements for secondary teaching licensure. For more information, see the Teaching and Learning Department.

Geography B.A. - Community and Environmental Planning < University of Montana

Geography B.A. - Community and Environmental Planning

Bachelor of Arts - Geography; Community & Environmental Planning Concentration

W.A. Franke College of Forestry and Conservation

Degree Specific Credits: 43 - 56

Required Cumulative GPA: 2.5

Catalog Year: 2019-2020

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

CODE	TITLE	HOURS
Introduction to Geography		7
Regional Geography Course		3
Methods		10
Geographic Methods		
Mathematics/Statistics		
Upper-Division Systematic Geography		9
Physical Geography		
Geography and Society		
Human Environment Interaction		
Capstone		1
Upper-Division Writing		3
Mathematics Requirement		
Community and Environmental Planning Concentration		13-20
Community and Environmental Planning Core		
Community and Environmental Planning Methods		
Community and Environmental Planning Electives		
Total Hours		46-53

Course List

Introduction to Geography

CODE	TITLE	HOURS
Complete all of the following courses:		
GPHY 111N	Intro to Physical Geography	3
GPHY 112N	Intro to Phys Geography Lab	1
GPHY 121S	Human Geography	3
Total Hours		7

Course List

Minimum Required Grade: C-

Regional Geography Course

CODE	TITLE	HOURS
Complete one of the following courses:		3
GPHY 141S	Geography of World Regions	
GPHY 144	Glacier National Park in Winter	
GPHY 241	Montana	
GPHY 243	Africa	
GPHY 245X	The Middle East	
GPHY 342	North America	
GPHY 344	Crown of the Continent	
GPHY 347	Regional Geography (Multiple Regions)	
GPHY 348	Field Studies in Geography	
GPHY 444	High Asia	
Total Hours		3

Course List

Minimum Required Grade: C-

Methods

Rule: Complete all of the following subcategories. 10 total credits required.

Geographic Methods

CODE	TITLE	HOURS
Complete all of the following courses:		
GPHY 284	Intro to GIS and Cartography	3
GPHY 385	Field Techniques	3
Total Hours		6

Course List

Minimum Required Grade: C-

Mathematics/Statistics

CODE	TITLE	HOURS
Complete the following course:		
STAT 216		4
Total Hours		4

Course List

Minimum Required Grade: C-

Upper-Division Systematic Geography

Rule: Complete the following subcategories. 9 total credits required.

Physical Geography

CODE	TITLE	HOURS
Complete one of the following courses:		3
ERTH 303N	Weather and Climate	
GPHY 311N	Biogeography	
GPHY 314	Global Mountain Environments	
GPHY 317	Geomorphology	
GPHY 438	Mountain Field Study	
GPHY 525	Advanced Physical Geography	
Total Hours		3

Course List

Minimum Required Grade: C-

Geography and Society

Note: GPHY 323S and GPHY 421 count simultaneously toward Upper Division Systematic Geography and CEP electives.

CODE	TITLE	HOURS
Complete one of the following courses:		3
GPHY 323S	Economic Geography of Rural Areas	
GPHY 421	Sustainable Cities	
GPHY 434	Food and Famine	
Total Hours		3

Course List

Minimum Required Grade: C-

Human Environment Interaction

Note: GPHY 335, GPHY 432, and GPHY 433 count simultaneously toward Upper Division Systematic Geography and CEP electives.

CODE	TITLE	HOURS
Complete one of the following courses:		3
GPHY 335	Water Policy	
GPHY 338	Mountains and Society	
GPHY 432	Human Role Environmental Change	
GPHY 433	Community Resilience	
Total Hours		3

Course List

Minimum Required Grade: C-

Capstone

Note: Seniors must enroll in GPHY 400 in fall, attend GPHY 500 in fall, and complete course requirements in final semester.

CODE	TITLE	HOURS
Complete the following course:		
GPHY 400	Geography Capstone	1
Total Hours		1

Course List

Minimum Required Grade: C-

Upper-Division Writing

Note: GPHY 335 or GPHY 433 will also count toward the upper-division core requirements and CEP Electives.

CODE	TITLE	HOURS
Complete one of the following courses:		3
GPHY 335	Water Policy	
GPHY 433	Community Resilience	
GPHY 499	Senior Thesis	
Total Hours		3

Course List

Minimum Required Grade: C-

Mathematics Requirement

Note: Students are encouraged to take M 115. Students who successfully complete M 122, M 171, or M 172 also meet the degree specific Mathematics requirement.

CODE	TITLE	HOURS
Complete one of the following courses:		3
M 115	Probability and Linear Mathematics	
M 121	College Algebra	
M 151	Precalculus	
M 162	Applied Calculus	
Total Hours		3

Course List

Minimum Required Grade: C-

Community and Environmental Planning Concentration

Rule: Complete the following subcategories. 13-20 total credits required.

Community and Environmental Planning Core

CODE	TITLE	HOURS
Complete all of the following courses:		
GPHY 465	Planning Principles & Processes	3
GPHY 466	Environmental Planning	3
Total Hours		6

Course List

Minimum Required Grade: C-

Community and Environmental Planning Methods

Note: GPHY 468 must be taken together with GPHY 469. GPHY 486 must be taken together with GPHY 489.

CODE	TITLE	HOURS
Complete one of the following courses:		4
GPHY 468 & GPHY 469	Community & Regional Analysis and Planning & Analysis Laboratory	
GPHY 486 & GPHY 489	Transport, Planning & GIS and Cartography/GIS Laboratory	
Total Hours		4

Course List

Minimum Required Grade: C-

Community and Environmental Planning Electives

Note: If not previously taken to fulfill CEP Methods, the following courses can be selected as electives:

- GPHY 468/GPHY 469 - 4 cr
- GPHY 486/GPHY 489 - 4 cr

Other courses can count towards CEP electives.

- GPHY 323S and GPHY 421 can be used to satisfy upper division requirements in 'Geography and Society.'

- GPHY 335, GPHY 432, and GPHY 433 can be used to satisfy upper division requirements in 'Human Environment Interaction.'

CODE	TITLE	HOURS
Complete three of the following courses:		9
GPHY 323S	Economic Geography of Rural Areas	
GPHY 335	Water Policy	
GPHY 421	Sustainable Cities	
GPHY 432	Human Role Environmental Change	
GPHY 433	Community Resilience	
Total Hours		9

Course List

Minimum Required Grade: C-

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., BIOO 105N , BIOE 172N) .

Bachelor of Science - Geography

W.A. Franke College of Forestry and Conservation

Degree Specific Credits: 46-48

Required Cumulative GPA: 2.5

Catalog Year: 2019-2020

Note: The Bachelor of Science in Geography requires 36 credits in GPHY courses.

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

		Course List
CODE	**TITLE**	**HOURS**
Introduction to Geography		7
Regional Geography Course		3
Geographic Methods		6
Upper Division Systematic Geography		9
Physical Geography		
Geography and Society		
Human Environment Interaction		
Degree Electives		11
Capstone		1
Upper Division Writing		3
Science Electives		6-8
Biology		
Chemistry		
College Chemistry		
College Physics		
Physics with Calculus		
Mathematics Requirement		
Math Fundamentals		
Advanced Math		
Total Hours		46-48

Introduction to Geography

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		7
GPHY 111N	Intro to Physical Geography	
GPHY 112N	Intro to Phys Geography Lab	
GPHY 121S	Human Geography	
Total Hours		7

Minimum Required Grade: C-

Regional Geography Course

Course List		
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		3
GPHY 141S	Geography of World Regions	
GPHY 144	Glacier National Park in Winter	
GPHY 241	Montana	
GPHY 245X	The Middle East	
GPHY 342	North America	
GPHY 344	Crown of the Continent	
GPHY 347	Regional Geography (Multiple Regions)	
GPHY 348	Field Studies in Geography	
GPHY 444	High Asia	
Total Hours		3

Minimum Required Grade: C-

Geographic Methods

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		6
GPHY 284	Intro to GIS and Cartography	
GPHY 385	Field Techniques	
Total Hours		6

Minimum Required Grade: C-

Upper Division Systematic Geography

Rule: Complete the following subcategories of courses. 9 total credits required.

Physical Geography

Course List		
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		3
ERTH 303N	Weather and Climate	
GPHY 311N	Biogeography	
GPHY 314	Global Mountain Environments	
GPHY 317	Geomorphology	
GPHY 438	Mountain Field Study	
GPHY 525	Advanced Physical Geography	
Total Hours		3

Minimum Required Grade: C-

Geography and Society

Course List		
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		3
GPHY 323S	Economic Geography of Rural Areas	
GPHY 421	Sustainable Cities	
GPHY 434	Food and Famine	
Total Hours		3

Minimum Required Grade: C-

Human Environment Interaction

Course List		
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		3
GPHY 335	Water Policy	
GPHY 338	Mountains and Society	
GPHY 432	Human Role Environmental Change	
GPHY 433	Community Resilience	
Total Hours		3

Minimum Required Grade: C-

Degree Electives

Course List		
CODE	**TITLE**	**HOURS**
Complete 11 GPHY credits for a total of 36 GPHY credits for the degree.		11
Total Hours		11

Minimum Required Grade: C-

Capstone

Note: Seniors must enroll in GPHY 400 in fall, attend GPHY 500 in fall, and complete course requirements in spring.

Course List		
CODE	**TITLE**	**HOURS**
Seniors must complete the following course:		
GPHY 400	Geography Capstone	1
Total Hours		1

Minimum Required Grade: C-

Upper-Division Writing

Note:

- GPHY 335 will also count toward the upper division core requirements
- GPHY 433 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 List		
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		3
GPHY 335	Water Policy	
GPHY 433	Community Resilience	
GPHY 499	Senior Thesis	
Total Hours		3

Minimum Required Grade: C-

Science Electives

Rule: Must complete 1 of the following science categories. 6-8 total credits required. Science sequence must be approved by an advisor as appropriate to individual student's goals. Different science sequences may be approved by the advisor.

Biology

Course List		
CODE	**TITLE**	**HOURS**
BIOE 172N	Introductory Ecology	3
BIOO 105N	Introduction to Botany	3
Total Hours		6

Minimum Required Grade: C-

Chemistry

Course List		
CODE	**TITLE**	**HOURS**
CHMY 121N	Introduction to General Chemistry	4
CHMY 123	Introduction to Organic and Biochemistry	4
Total Hours		8

Minimum Required Grade: C-

College Chemistry

Course List		
CODE	**TITLE**	**HOURS**
CHMY 141N	College Chemistry I	4
CHMY 143N	College Chemistry II	4
Total Hours		8

Minimum Required Grade: C-

College Physics

Course List		
CODE	**TITLE**	**HOURS**
PHSX 205N	College Physics I	4
PHSX 207N	College Physics II	4
Total Hours		8

Minimum Required Grade: C-

Physics with Calculus

Course List		
CODE	**TITLE**	**HOURS**
PHSX 215N	Fund of Physics w/Calc I	4
PHSX 217N	Fund of Physics w/Calc II	4
Total Hours		8

Minimum Required Grade: C-

Mathematics Requirement

Rule: Must complete 1 of the following subcategories. 3-7 total credits required.

Note: Students take a statistics course; M 115 and STAT 216, OR just one of M 162, M 171, or STAT 451. M 171 is recommended.

Math Fundamentals

Course List		
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		7
M 115	Probability and Linear Mathematics	
STAT 216	Introduction to Statistics	
Total Hours		7

Minimum Required Grade: C-

Advanced Math

Course List		
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		3-4
M 162	Applied Calculus	
M 171	Calculus I (recommended)	
STAT 451	Statistical Methods I	
Total Hours		3-4

Minimum Required Grade: C-

Geography B.S. - Physical Geography

In addition to satisfying the general requirements for a B.S. in Geography, a student pursuing the concentration in Physical Geography must complete additional requirements, including ERTH 303N GPHY311 Biogeography, and GPHY 317, and a two-course sequence of basic science, though substitutions that 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 degree mathematics requirements (the second semester of Calculus is recommended).

Bachelor of Science - Geography; Physical Geography Concentration

W.A. Franke College of Forestry and Conservation

Degree Specific Credits: 44-46

Required Cumulative GPA: 2.5

Catalog Year: 2019-2020

Note: Depending on the courses selected the degree requirements vary from 45 to 56 credits.

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

		Course List
CODE	**TITLE**	**HOURS**
Introduction to Geography		7
Regional Geography Course		3
Geographic Methods		6
Upper-Division Systematic Geography		9
Physical Geography		
Geography and Society		
Human Environment Interaction		
Capstone		1
Upper-Division Writing		3
Science Electives		6-8
Biology		
Chemistry		
College Chemistry		
College Physics		
Physics with Calculus		
Physical Geography Concentration Core		9
Math Requirement		
Advanced Math Requirement		
Total Hours		44-46

Introduction to Geography

		Course List
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
GPHY 111N	Intro to Physical Geography	3
GPHY 112N	Intro to Phys Geography Lab	1
GPHY 121S	Human Geography	3
Total Hours		7

Minimum Required Grade: C-

Regional Geography Course

		Course List
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		3
GPHY 141S	Geography of World Regions	
GPHY 144	Glacier National Park in Winter	
GPHY 241	Montana	
GPHY 245X	The Middle East	
GPHY 342	North America	
GPHY 344	Crown of the Continent	
GPHY 347	Regional Geography (Multiple Regions)	
GPHY 348	Field Studies in Geography	
GPHY 444	High Asia	
Total Hours		3

Minimum Required Grade: C-

Geographic Methods

		Course List
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		
GPHY 284	Intro to GIS and Cartography	3
GPHY 385	Field Techniques	3
Total Hours		6

Minimum Required Grade: C-

Upper-Division Systematic Geography

Rule: Complete the following subcategories of courses. 9 total credits required.

Physical Geography

Note: These courses simultaneously count towards the Upper Division Systematic Geography-Physical Geography and the Physical Geography Concentration core (see below).

		Course List
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		3
ERTH 303N	Weather and Climate	
GPHY 311N	Biogeography	
GPHY 314	Global Mountain Environments	
GPHY 317	Geomorphology	
GPHY 438	Mountain Field Study	
GPHY 525	Advanced Physical Geography	
Total Hours		3

Minimum Required Grade: C-

Geography and Society

		Course List
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		3
GPHY 323S	Economic Geography of Rural Areas	
GPHY 421	Sustainable Cities	
GPHY 434	Food and Famine	
Total Hours		3

Minimum Required Grade: C-

Human Environment Interaction

		Course List
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		3
GPHY 335	Water Policy	
GPHY 338	Mountains and Society	
GPHY 432	Human Role Environmental Change	
GPHY 433	Community Resilience	
Total Hours		3

Minimum Required Grade: C-

Capstone

Note: Seniors must enroll in GPHY 400 in fall, attend GPHY 500 in fall, and complete course requirements in spring.

		Course List
CODE	**TITLE**	**HOURS**
Complete the following course:		
GPHY 400	Geography Capstone	1
Total Hours		1

Minimum Required Grade: C-

Upper-Division Writing

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 List
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		3
GPHY 335	Water Policy	
GPHY 433	Community Resilience	
GPHY 499	Senior Thesis	
Total Hours		3

Minimum Required Grade: C-

Science Electives

Rule: Must complete 1 of the following science categories. 6-8 total credits required.

Biology

		Course List
CODE	**TITLE**	**HOURS**
BIOE 172N	Introductory Ecology	3
BIOO 105N	Introduction to Botany	3
Total Hours		6

Minimum Required Grade: C-

Chemistry

		Course List
CODE	**TITLE**	**HOURS**
CHMY 121N	Introduction to General Chemistry	4
CHMY 123	Introduction to Organic and Biochemistry	4
Total Hours		8

Minimum Required Grade: C-

College Chemistry

		Course List
CODE	**TITLE**	**HOURS**
CHMY 141N	College Chemistry I	4
CHMY 143N	College Chemistry II	4
Total Hours		8

Minimum Required Grade: C-

College Physics

		Course List
CODE	**TITLE**	**HOURS**
PHSX 205N	College Physics I	4
PHSX 207N	College Physics II	4
Total Hours		8

Minimum Required Grade: C-

Physics with Calculus

		Course List
CODE	**TITLE**	**HOURS**
PHSX 215N	Fund of Physics w/Calc I	4
PHSX 217N	Fund of Physics w/Calc II	4
Total Hours		8

Minimum Required Grade: C-

Physical Geography Concentration Core

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 List
CODE	**TITLE**	**HOURS**
Complete all of the following courses:		9
ERTH 303N	Weather and Climate	
GPHY 311N	Biogeography	
GPHY 317	Geomorphology	
Total Hours		9

Minimum Required Grade: C-

Math Requirement

		Course List
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		3-4
M 162	Applied Calculus	
M 171	Calculus I	
M 172	Calculus II	
STAT 451	Statistical Methods I	
Total Hours		3-4

Minimum Required Grade: C-

Advanced Math Requirement

Note: Example - if M 171 has been taken, M 172 is recommended.

		Course List
CODE	**TITLE**	**HOURS**
Complete 1 additional Math or Statistics course in addition to the one chosen for the Math Requirement.		3-4
Total Hours		3-4

Minimum Required Grade: C-

Geography Minor < University of Montana

Geography Minor

Minor - Geography

W.A. Franke College of Forestry and Conservation

Degree Specific Credits: 19

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Summary

CODE	TITLE	HOURS
Introduction to Geography		7
Regional Core		3
Geographic Methods		3
Upper-Division Systematic Geography		6
Teaching Geography Track		
Total Hours		19

Course List

Introduction to Geography

CODE	TITLE	HOURS
Complete all of the following courses:		
GPHY 111N	Intro to Physical Geography	3
GPHY 112N	Intro to Phys Geography Lab	1
GPHY 121S	Human Geography	3
Total Hours		7

Course List

Minimum Required Grade: C-

Regional Core

CODE	TITLE	HOURS
Complete one of the following courses:		3
GPHY 141S	Geography of World Regions	
GPHY 144	Glacier National Park in Winter	
GPHY 241	Montana	
GPHY 245X	The Middle East	
GPHY 342	North America	
GPHY 344	Crown of the Continent	
GPHY 347	Regional Geography (Multiple Regions)	
GPHY 348	Field Studies in Geography	
GPHY 444	High Asia	
Total Hours		3

Course List

Minimum Required Grade: C-

Geographic Methods

CODE	TITLE	HOURS
Complete one of the following courses:		3
GPHY 284	Intro to GIS and Cartography	
GPHY 385	Field Techniques	
Total Hours		3

Course List

Minimum Required Grade: C-

Upper-Division Systematic Geography

Rule: Complete at least 1 course from 2 of the following 3 subcategories. 6 total credits required.

Physical Geography

CODE	TITLE	HOURS
Complete one of the following courses:		3
ERTH 303N	Weather and Climate	
GPHY 311N	Biogeography	
GPHY 314	Global Mountain Environments	
GPHY 317	Geomorphology	
GPHY 438	Mountain Field Study	
GPHY 525	Advanced Physical Geography	
Total Hours		3

Course List

Minimum Required Grade: C-

Geography and Society

CODE	TITLE	HOURS
Complete one of the following courses:		3
GPHY 323S	Economic Geography of Rural Areas	
GPHY 421	Sustainable Cities	
GPHY 434	Food and Famine	
Total Hours		3

Course List

Minimum Required Grade: C-

Human Environment Interaction

CODE	TITLE	HOURS
Complete one of the following courses:		3
GPHY 335	Water Policy	
GPHY 338	Mountains and Society	
GPHY 432	Human Role Environmental Change	
GPHY 433	Community Resilience	
Total Hours		3

Course List

Minimum Required Grade: C-

Teaching Geography Track

Notes:

- This teaching track contains different/additional course requirements designed to meet state standards. Those interested in teaching in K-12 schools must complete the teaching track of a major in a teaching content area plus the Teacher Education Program through the Department of Teaching and Learning. Additional teaching areas can be added through completion of the teaching track of a major or minor in that content area.

  - Secondary Education Licensure Program
  - Licensure Degree Requirements
- To complete this teaching track, you need to contact the Teaching and Learning Department. You do not fill out a major/minor form for graduation or the major/minor/concentration section of the major change form. Approvals for this track must come from the Teaching and Learning Department.
- Tracks will not appear on your UM transcript, diploma, university lists, student data system, or university publications. They are used for advising purposes only. You do not fill out a major change for a track.
- Individuals completing the teaching track of this minor must also complete the teaching track of a major in another teaching content area.

Teaching Geography Required Course

Note: The EDU 497 course number is used for multiple courses. Students should register for EDU 497 Methods: 5-12 Social Studies.

CODE	TITLE	HOURS
Complete the following course:		
EDU 497	Teaching and Assessing	4
Total Hours		4

Course List

Minimum Required Grade: C-

Secondary Teaching Licensure

Note: For endorsement to teach geography, a student also must gain admission to the Teacher Education Program and meet all the requirements for secondary teaching licensure. For more information, see the Teaching and Learning Department.

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 10 required credits and 10 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.

Post-secondary Certificate - Geographic Information Systems

W.A. Franke College of Forestry and Conservation

Degree Specific Credits: 20-21

Required Cumulative GPA: 3.0

Catalog Year: 2019-2020

Summary

		Course List
CODE	**TITLE**	**HOURS**
Required GIS Core Courses		9-11
Introduction to GIS		
Photogrammetry/Remote Sensing		
Advanced Elective Courses		10-11
Raster GIS, Remote Sensing, and Image Analysis		
Vector GIS and Networks		
Data Management and Programming		
Total Hours		20-21

Required GIS Core Courses

Rule: Complete each of the following subcategories. 9-10 total credits required.

Introduction to GIS

Course List		
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		3
FORS 250	Intro to GIS for Forest Mgt	
GPHY 284	Intro to GIS and Cartography	
Total Hours		3

Minimum Required Grade: C-

Photogrammetry/Remote Sensing

Course List		
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		3-4
FORS 351	Env Remote Sensing	
GPHY 487 & GPHY 489	Remote Sensing/Raster GIS and Cartography/GIS Laboratory	
Total Hours		3-4

Minimum Required Grade: C-

Additional Required Courses

Course List		
CODE	**TITLE**	**HOURS**
Complete one of the following courses:		3
FORS 350	Forestry Apps of GIS	
GPHY 488	Applications of GIS	
Total Hours		3

Minimum Required Grade: C-

Elective Courses

Course List		
CODE	**TITLE**	**HOURS**
Complete 10 credits of the following courses:		10
ANTY 452	GIS in Archaeology	
CSCI 125	Computation in the Sciences	
CSCI 126	Computation in the Sciences with Calculus	
FORS 505	Sampling Methods	
FORS 551	Digital Image Processing	
GPHY 385	Field Techniques	
GPHY 468 & GPHY 469	Community & Regional Analysis and Planning & Analysis Laboratory	
GPHY 474	UAV RS for Freshwater Ecology	
GPHY 481	Advanced Cartographic Design	
GPHY 485	Internet GIS	
GPHY 486 & GPHY 489	Transport, Planning & GIS and Cartography/GIS Laboratory	
GPHY 564	Planning Design	
GPHY 580	Seminar GIS & Cartography	
GPHY 587 & GPHY 589	Image Analysis & Modeling and Cartography/GIS Laboratory	
GPHY 588 & GPHY 589	Spatial Analysis and Modeling and Cartography/GIS Laboratory	
WILD 562	Wildlife Habitat Modeling	

Minimum Required Grade: C-

Parks, Tourism, and Recreation Management B.S. < University of Montana

Parks, Tourism, and Recreation Management B.S.

- Overview
- Requirements

Libby Metcalf, Director

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 concentration in Recreation Resources Management or Nature-Based Tourism. The Recreation Resources Management concentration provides the educational background necessary for evaluating and managing wild lands to protect their recreational, heritage, and ecological values. The Nature-Based Tourism concentration 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, and Recreation Management

W.A Franke College of Forestry & Conservation

Degree Specific Credits: 67-73

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

CODE	TITLE	HOURS
Lower-Division Major Required Courses		12
Lower-Division Outside Major Required Courses		24-25
Upper-Division Major Required Courses		25-30
Skills Courses		3
Upper-Division Writing Requirement		3
Total Hours		67-73

Course List

Lower-Division Major Required Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
NRSM 121S	Nature of Montana	3
or PTRM 141Y	National Parks and American Culture	
NRSM 210N	Soils, Water and Climate	3
PTRM 210S	Nature Tourism & Comm Rec	3
PTRM 217S	Parks & Outdoor Rec. Mgmt.	3
Total Hours		12

Course List

Minimum Required Grade: C-

Lower-Division Outside Major Required Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
ACTG 201	Principles of Financial Accounting	3
ACTG 202	Principles of Managerial Accounting	3
COMX 111A	Introduction to Public Speaking	3
or THTR 120A	Introduction to Acting I	
ECNS 201S	Principles of Microeconomics	3
M 115	Probability and Linear Mathematics	3
PSYX 100S	Intro to Psychology	3
or SOCI 101S	Introduction to Sociology	
Complete one of the following courses:		3
BIOB 170N	Princpls Biological Diversity	
BIOE 172N	Introductory Ecology	
BIOO 105N	Introduction to Botany	
Complete one of the following courses:		3-4
STAT 216	Introduction to Statistics	
SOCI 202	Social Statistics	
FORS 201	Forest Biometrics	
Total Hours		24-25

Course List

Minimum Required Grade: C-

Upper-Division Major Required Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
FORS 330	Forest Ecology	3
or NRSM 462	Rangeland Ecology	
NRSM 422	Nat Res Policy/Administration	3
PTRM 300	Recreation Behavior	3
PTRM 310	Nat Res Interp and Comm	3
PTRM 380	Rec Admin & Leadership	3
PTRM 482	Wilderness & Protected Area Management	3
or PTRM 451	Tourism & Sustainability	
PTRM 484	PTRM Field Measurement Tech	3
PTRM 485	Recreation Planning	3
or PTRM 486	Commercial Recreation, Marketing and Tourism	
PTRM 495	Practicum in PTRM	1-6
Total Hours		25-30

Course List

Skills Courses

CODE	TITLE	HOURS
Complete 3 credits from the following courses:		3
ECP 120 & ECP 121	Emergency Medical Responder Lecture and Emergency Medical Responder Lab	
NRSM 379	Collab in Nat Res Decisions	
BMKT 325	Principles of Marketing	
FORS 250	Intro to GIS for Forest Mgt	
Total Hours		3

Course List

Minimum Required Grade: C-

Upper-Division Writing Requirement

CODE	TITLE	HOURS
Complete one of the following courses:		3
PTRM 451	Tourism & Sustainability	
PTRM 482	Wilderness & Protected Area Management	
Total Hours		3

Course List

Minimum Required Grade: C-

Tracks

These are advising tracks only and not official programs 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.

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.

CODE	TITLE	HOURS
ANTY 101H	Anthro & the Human Experience	3
BMKT 325	Principles of Marketing	3
BMKT 337	Consumer Behavior	3
COMX 220S	Introduction to Organizational Communication	3
COMX 351	Principles of Public Relations	3
ECNS 202S	Principles of Macroeconomics	3
FORS 202	Forest Mensuration	3
FORS 320	Forest Environmental Economics	3
FORS 351	Env Remote Sensing	3
GEO 101N	Introduction to Physical Geology	3
GPHY 111N	Intro to Physical Geography	3
GPHY 311N	Biogeography	3
GPHY 433	Community Resilience	3
NRSM 379	Collab in Nat Res Decisions	3
NRSM 389E	Ethics Forestry & Conservation	3
NRSM 475	Environment & Development	3
PHL 112E	Intro Ethics and Environment	3
PTRM 150	Current Issues in PTRM	1

Course List

Minimum Required Grade: C-

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.

CODE	TITLE	HOURS
BMGT 401	Event Management	3
COMX 115S	Introduction to Interpersonal Communications	3
COMX 220S	Introduction to Organizational Communication	3
COMX 421	Communication in Nonprofit Organizations	3
ENST 225S	Sustainable Communities	3
ENST 230H	Nature and Society	3
GPHY 121S	Human Geography	3
NASX 180	Event Planning	3
NPAD 460	Nonprofit Marketing and Social Media	2
NPAD 467	Advanced Nonprofit Admin	3
NRSM 379	Collab in Nat Res Decisions	3
PTRM 150	Current Issues in PTRM	1
S W 300	Hum Behav & Soc Environ	3
SOCI 346	Rural Sociology	3
SOCI 350	The Community	3

Course List

Minimum Required Grade: C-

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.

CODE	TITLE	HOURS
CHMY 121N	Introduction to General Chemistry	4
COMX 421	Communication in Nonprofit Organizations	3
FORS 230	Fire Management & Environmental Change	3
FORS 240	Tree Biology	2
FORS 241N	Dendrology	3
FORS 250	Intro to GIS for Forest Mgt	3
FORS 331	Wildland Fuel Management	3
FORS 333	Fire Ecology	3
FORS 347	Multiple Resource Silviculture	3
GPHY 121S	Human Geography	3
GPHY 433	Community Resilience	3
NRSM 265	Elements of Ecological Restoration	3
NRSM 379	Collab in Nat Res Decisions	3
NRSM 389E	Ethics Forestry & Conservation	3
NRSM 475	Environment & Development	3
PTRM 150	Current Issues in PTRM	1

Course List

Minimum Required Grade: C-

Resource Conservation B.S. < University of Montana

Resource Conservation B.S.

- Overview
- Requirements

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. Please go to the Resource Conservation website for more information on different curricular tracks within the Resource Conservation major. 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

W.A Franke College of Forestry & Conservation

Degree Specifi

Required Cum

Catalog Yea

General E

Information re

Summary

Chemistry
Quantitative a
Biology
Communicati
Physical Scier
Ecology
Policy
Social Science
Ethics
Additional Re
Upper-Divisio
Total Hours

Course List

Chemistry

CODE	TITLE	HOURS
Complete the following course:		

CODE	TITLE	HOURS
CHMY 121N	Introduction to General Chemistry	4
Total Hours		4

Course List

Quantitative and Spatial Analysis

CODE	TITLE
Complete one of the following courses:	
FORS 201	Forest Biometrics
STAT 216	Introduction to Statistics
SOCI 202	Social Statistics
Complete two of the following courses:	
FORS 250	Intro to GIS for Forest Mgt (highly recommended)
M 115	Probability and Linear Mathematics
M 121	College Algebra
M 122	College Trigonometry
M 151	Precalculus
M 162	Applied Calculus
Total Hours	

Course List

Biology

CODE	TITLE	HOURS
Complete one of the following courses:		3-4
BIOB 160N	Principles of Living Systems	
BIOB 170N	Princpls Biological Diversity	
BIOE 172N	Introductory Ecology	
BIOO 105N	Introduction to Botany	
Total Hours		3-4

Course List

Communication

CODE	TITLE	
Complete one of the following courses:		
COMX 111A	Introduction to Public Speaking	3
or THTR 120A	Introduction to Acting I	
Total Hours		3

Course List

Physical Science

CODE	TITLE	
Complete the following course:		
NRSM 210N	Soils, Water and Climate	3

CODE	TITLE	
Total Hours		3

Course List

Ecology

CODE	TITLE	HOURS
Complete one of the following courses:		3
BIOE 370	General Ecology	
FORS 330	Forest Ecology	
NRSM 462	Rangeland Ecology	
Total Hours		3

Course List

Policy

CODE	TITLE	HOURS
Complete one of the following courses:		3
NRSM 370S	Wildland Conservation Policy/Governance	
NRSM 422	Nat Res Policy/Administration	
WILD 410	Wildlife Policy & Biopolitics	
NRSM 427	Advanced Water Policy	
Total Hours		3

Course List

Social Science

CODE	TITLE	
Complete one of the following courses:		3
NRSM 379	Collab in Nat Res Decisions	
NRSM 424	Community Forestry & Conservtn	
NRSM 426	Climate and Society	
NRSM 475	Environment & Development	
PTRM 300	Recreation Behavior	
Total Hours		3

Course List

Ethics

CODE	TITLE	HOURS
Complete one of the following courses:		
NRSM 349E	Climate Change Ethics/Policy	3
or NRSM 389E	Ethics Forestry & Conservation	
Total Hours		3

Course List

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 103X, CCS 352, CCS 391)

Note: In addition to the above requirements, Resource Conservation students are also required to take at least 10 additional credits in their area of emphasis. Students can choose courses from the following prefixes: BIOO, BIOE, CHMY, ENSC, FORS, GEOS, M, NRSM, PHSX, and WILD. Alternatively, students can take two semesters of a foreign language (or otherwise demonstrate foreign language proficiency).

All students must take at least 49 approved credits in the major.

Students double majoring with Resource Conservation and Ecological Restoration, Forestry, Wildlife Biology, and Parks, Tourism and Recreation Management must take an additional 9.0 credits in FORS, NRSM, PTRM, and WILD in addition to courses required by either of their majors. These additional 9.0 credits will be relevant to the student s track/emphasis with the major.

Minimum Required Grade: C-

These are advising tracks only and not official programs 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.

Climate & Environmental Change Track

Note: More detailed information about the Clima & Environmental Change track can be found on
track typically complete the Climate Change Minor (www.cfc.umt.edu/ccs). Please talk with your
track.

Wildlife Biology < University of Montana

Wildlife Biology

- Overview
- Programs

Chad Bishop, Wildlife Biology; 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.

Two concentrations are offered in the Wildlife Biology Program: terrestrial and aquatic. They both 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.

Wildlife Biology Honors Track

The honors curriculum is designed particularly for students with strong academic records who intend to do graduate work. Entrance into this emphasis is open only to students who, at the beginning of the junior year of the wildlife biology program, have a grade-point average of 3.5 or above and who petition the faculty for entrance.

Honors students must complete either WILD 370, WILD 470 and WILD 494 (terrestrial option) or BIOO 340, BIOE 428 and WILD 494 (aquatic option). Honors students are encouraged to enroll also in WILD 499. The balance of the coursework for the junior and senior years will be developed in consultation with the honors student's faculty advisor and committee.

All students in the honors emphasis are required to meet with their faculty advisor prior to autumn semester registration of their junior and senior years to work out their course schedules.

Undergraduate

- Wildlife Biology B.S., Aquatic Wildlife Biology Concentration
- Wildlife Biology B.S., Terrestrial Wildlife Biology Concentration

Undergraduate Minors

- Wildlife Biology

Wildlife Biology - Aquatic < University of Montana

Wildlife Biology - Aquatic

- Overview
- Requirements

Chad Bishop, Wildlife Biology Director

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Honors students must complete either WILD 370, WILD 470 and WILD 494 (terrestrial option) or BIOO 340, BIOE 428 and WILD 494 (aquatic option). Honors students are encouraged to enroll also in WILD 499. The balance of the coursework for the junior and senior years will be developed in consultation with the honors student's faculty advisor.

All students in the honors emphasis are required to meet with their faculty advisor prior to autumn semester registration of their junior and senior years to work out their course schedules.

Bachelor of Science - Wildlife Biology; Aquatic Concentration

W.A Franke College of Forestry & Conservation

Degree Specific Credits: 87-89

Required Cumulative GPA: 2.5

Catalog Year: 2019-2020

Note: Experiential Learning is required - Students have several options to fulfill this requirement - list is available from the Wildlife Advisor in Forestry 103C

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

CODE	TITLE	HOURS
Major Required Courses		29
Major Required Courses - Aquatic Concentration		23-24
Outside Major Required Courses		20-21
Advanced College Writing Requirement		15
Total Hours		87-89

Course List

Major Required Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
BIOB 160N	Principles of Living Systems	3
BIOB 161N	Prncpls of Living Systems Lab	1
BIOB 260	Cellular and Molecular Biology	4
BIOB 272	Genetics and Evolution	4
BIOE 370	General Ecology	3
BIOE 371	Gen Ecology Lab (equiv to 271)	2
WILD 180	Careers in Wildlife Biology	2
WILD 346	Wildlife Physiological Ecology	3
WILD 410	Wildlife Policy & Biopolitics	3
or NRSM 422	Nat Res Policy/Administration	
WILD 480	The Upshot--Appld Wildlife Mgt	3
WILD 494	Senior Wildlife Seminar	1
Total Hours		29

Course List

Minimum Required Grade: C-

Major Required Courses - Aquatic Concentration

CODE	TITLE	HOURS
Complete all of the following courses:		
BIOE 428	Freshwater Ecology	5
BIOO 320	General Botany	5
BIOO 340	Biology and Mgmnt of Fishes	4
NRSM 385	Watershed Hydrology	3
WILD 408	Advanced Fisheries	3
Complete one of the following courses:		3-4
BIOE 406	Behavior & Evolution	
BIOM 427 & BIOM 428	General Parasitology and General Parasitology Lab	
BIOO 462	Entomology	
WILD 485	Aquatic Invertebrate Ecology	
Total Hours		23-24

Course List

Minimum Required Grade: C-

Outside Major Required Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
CHMY 121N	Introduction to General Chemistry	4
CHMY 123	Introduction to Organic and Biochemistry	4
CHMY 124	Introduction to Organic and Biochemistry Lab	2
COMX 111A	Introduction to Public Speaking	3
M 162	Applied Calculus	4
STAT 216	Introduction to Statistics	3-4
or WILD 240	Intro to Biostatistics	
Total Hours		20-21

Course List

Minimum Required Grade: C-

Advanced College Writing Requirement

CODE	TITLE	HOURS
Complete any three of the courses from the following lists:		
The following courses are required in the Aquatic Concentration:		15

CODE	TITLE	HOURS
BIOE 371	Gen Ecology Lab (equiv to 271)	
BIOE 428	Freshwater Ecology	
BIOO 320	General Botany	
WILD 408	Advanced Fisheries	
The following courses are additional options that can also be used to fulfill the Advanced College Writing requirement:		
BIOB 483	Phylogenics and Evolution	
BIOE 342	Field Ecology	
BIOE 403	Comparative Vert Anatomy	
BIOE 409	Behavior & Evolution Discussion	
BIOL 484	Plant Evolution	
BIOO 470	Ornithology	
BIOO 475	Mammalogy	
FORS 330	Forest Ecology	
FORS 341	Timber Harvesting & Roads	
FORS 349	Practice of Silviculture	
FORS 440	Forest Stand Management	
NRSM 344	Ecosystem Science and Restoration Capstone	
NRSM 349E	Climate Change Ethics/Policy	
NRSM 379	Collab in Nat Res Decisions	
NRSM 426	Climate and Society	
NRSM 462	Rangeland Ecology	
NRSM 475	Environment & Development	
PTRM 300	Recreation Behavior	
PTRM 451	Tourism & Sustainability	
PTRM 482	Wilderness & Protected Area Management	
WILD 410	Wildlife Policy & Biopolitics	
WILD 470	Conserv of Wildlife Populatns	
WILD 499	Thesis	
Total Hours		15

Course List

Minimum Required Grade: C-

Wildlife Biology - Terrestrial < University of Montana

Wildlife Biology - Terrestrial

- Overview
- Requirements

Chad Bishop, Wildlife Biology, 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.

Two concentrations are offered in the Wildlife Biology Program: terrestrial and aquatic. They both 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.

Wildlife Biology Honors - Track

The honors curriculum is designed particularly for students with strong academic records who intend to do graduate work. Entrance into this emphasis is open only to students who, at the beginning of the junior year of the wildlife biology program, have a grade-point average of 3.5 or above and who petition the faculty for entrance.

Honors students must complete either WILD 370, WILD 470 and WILD 494 (terrestrial option) or BIOO 340, BIOE 428 and WILD 494 (aquatic option). Honors students are encouraged to enroll also in WILD 499. The balance of the coursework for the junior and senior years will be developed in consultation with the honors student's faculty.

All students in the honors emphasis are required to meet with their faculty advisor prior to autumn semester registration of their junior and senior years to work out their course schedules.

Bachelor of Science - Wildlife Biology; Terrestrial Concentration

W.A Franke College of Forestry & Conservation

Degree Specific Credits: 84-85

Required Cumulative GPA: 2.5

Catalog Year: 2019-2020

Note: Experiential Learning is required - Students have several options to fulfill this requirement - list is available from the Wildlife Advisor in Forestry 103C.

General Education Requirements

Information regarding these requirements can be found in the General Education Section of the catalog.

Summary

CODE	TITLE	HOURS
Major Required Courses		29
Major Required Courses - Terrestrial Concentration		22
Outside Major Required Courses		20-21
Advanced College Writing Requirement		13
Total Hours		84-85

Course List

Major Required Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
BIOB 160N	Principles of Living Systems	3
BIOB 161N	Prncpls of Living Systems Lab	1
BIOB 260	Cellular and Molecular Biology	4
BIOB 272	Genetics and Evolution	4
BIOE 370	General Ecology	3
BIOE 371	Gen Ecology Lab (equiv to 271)	2
WILD 180	Careers in Wildlife Biology	2
WILD 346	Wildlife Physiological Ecology	3
WILD 410	Wildlife Policy & Biopolitics	3
or NRSM 422	Nat Res Policy/Administration	
WILD 480	The Upshot--Appld Wildlife Mgt	3
WILD 494	Senior Wildlife Seminar	1
Total Hours		29

Course List

Minimum Required Grade: C-

Major Required Courses - Terrestrial Concentration

CODE	TITLE	HOURS
Complete all of the following courses:		
BIOO 335	Rocky Mountain Flora	3
NRSM 360	Rangeland Mgt (equiv 260)	3
or FORS 347	Multiple Resource Silviculture	
WILD 370	Wildlife Habitat Cons & Mgmt	4
WILD 470	Conserv of Wildlife Populatns	4
Complete two of the following courses:		8
BIOO 340	Biology and Mgmnt of Fishes	
BIOO 470	Ornithology	
BIOO 475	Mammalogy	
Total Hours		22

Course List

Minimum Required Grade: C-

Outside Major Required Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
CHMY 121N	Introduction to General Chemistry	4
CHMY 123	Introduction to Organic and Biochemistry	4
CHMY 124	Introduction to Organic and Biochemistry Lab	2
COMX 111A	Introduction to Public Speaking	3
M 162	Applied Calculus	4
STAT 216	Introduction to Statistics	3-4
or WILD 240	Intro to Biostatistics	
Total Hours		20-21

Course List

Minimum Required Grade: C-

Advanced College Writing Requirement

CODE	TITLE	HOURS
Complete any three of the courses from the following lists:		
The following courses are required in the Terrestrial Concentration:		13
BIOE 371	Gen Ecology Lab (equiv to 271)	
BIOO 470	Ornithology	

CODE	TITLE	HOURS
BIOO 475	Mammalogy	
WILD 470	Conserv of Wildlife Populatns	
The following courses are additional options that can also be used to fulfill the Advanced College Writing requirement:		
BIOB 483	Phylogenics and Evolution	
BIOE 342	Field Ecology	
BIOE 403	Comparative Vert Anatomy	
BIOE 409	Behavior & Evolution Discussion	
BIOE 428	Freshwater Ecology	
BIOL 484	Plant Evolution	
BIOO 320	General Botany	
BIOO 434	Plant Physiology Lab	
FORS 330	Forest Ecology	
FORS 341	Timber Harvesting & Roads	
FORS 349	Practice of Silviculture	
FORS 440	Forest Stand Management	
NRSM 344	Ecosystem Science and Restoration Capstone	
NRSM 349E	Climate Change Ethics/Policy	
NRSM 379	Collab in Nat Res Decisions	
NRSM 389E	Ethics Forestry & Conservation	
NRSM 426	Climate and Society	
NRSM 462	Rangeland Ecology	
NRSM 475	Environment & Development	
NRSM 495	Ecosystem Science and Restoration Practicum	
PTRM 300	Recreation Behavior	
PTRM 451	Tourism & Sustainability	
PTRM 482	Wilderness & Protected Area Management	
WILD 408	Advanced Fisheries	
WILD 410	Wildlife Policy & Biopolitics	
WILD 499	Thesis	
Total Hours		13

Course List

Minimum Required Grade: C-

Wildlife Biology Minor < University of Montana

Wildlife Biology Minor

- Overview
- Requirements

Chad Bishop, 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.

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Minor - Wildlife Biology

W.A Franke College of Forestry & Conservation

Degree Specific Credits: 19-23

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Summary

CODE	TITLE	HOURS
Required Courses		19-23
Total Hours		19-23

Course List

Required Courses

CODE	TITLE	HOURS
Complete all of the following courses:		
BIOB 160N	Principles of Living Systems	3
BIOB 170N	Princpls Biological Diversity	3
BIOB 171N	Princpls Biological Dvrsty Lab	2
BIOB 272	Genetics and Evolution	4
Complete one of the following courses:		2-3
BIOO 101N	Survey MT Wildlife & Habitats	
WILD 105N	Wildlife & People	
WILD 180	Careers in Wildlife Biology	
Complete one 200-level or greater WILD course		2-4
Complete one upper-division course chosen from BIOE, BIOO, NRSM, PTRM or WILD		3-4
Total Hours		19-23

Course List

Minimum Required Grade: C-

Climate Change Studies Minor

- Overview
- Requirements

Peter McDonough, Coordinator

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 W.A Franke College of Forestry and Conservation, College of Arts and Sciences, and Missoula College s Energy Technology program.

Minor - Climate Change Studies

Degree Specific Credits: 21

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Summary

Course List		
CODE	**TITLE**	**HOURS**
Required Course		3
Climate Change Science		6
Climate Change and Society		6
Climate Change Solutions		6
Total Hours		21

Required Course

Course List		
CODE	**TITLE**	**HOURS**
Complete the following course:		
CCS 103X	Intro Climate Change:Sci & Soc	3
Total Hours		3

Minimum Required Grade: C-

Climate Change Science

		Course List
CODE	**TITLE**	**HOURS**
Complete 6 credits from the following courses:		6
ERTH 303N	Weather and Climate	
NRSM 210	Soils, Water, And Climate	
NRSM 281	Science of Climate Change	
NRSM 408	Global Cycles and Climate	
NRSM 418	Ecosystem Climatology	
Total Hours		6

Minimum Required Grade: C-

Climate Change and Society

Course List		
CODE	**TITLE**	**HOURS**
Complete 6 credits from the following courses:		6
COMX 349	Communication, Consumption, and Climate	
ECNS 445	Int Env Econ & Clim Change	
ENST 367	Environmental Politics & Policies	
ENST 427	Social Issues:The Mekong Delta	
NRSM 349E	Climate Change Ethics/Policy	
NRSM 426	Climate and Society	
PHL 112E	Intro Ethics and Environment	
PSCI 468		
Total Hours		6

Minimum Required Grade: C-

Climate Change Solutions

Note: Students must complete one course from each category for a total of 6 credits.

Category A

		Course List
CODE	**TITLE**	**HOURS**
Complete three credits of the following courses:		3
CCS 395	Climate Change Practicum	
CCS 398	Clmt Change Internship/SERV	
ENST 476	Environmental Citizenship	
Total Hours		3

Minimum Required Grade: C-

Category B

Course List		
CODE	**TITLE**	**HOURS**
Complete three credits of the following courses:		3
BGEN 160S	Issues in Sustainability	
BGEN 445	Sustainability Reporting	
BMGT 410	Sustainable Business Practices	
CCS 352	Climate Field Studies	
ENST 291	Special Topics/Experimental Courses (Energy and Climate)	
ENST 437	Climate Change: Mekong Delta	
GPHY 421	Sustainable Cities	
Total Hours		3

Minimum Required Grade: C-

Fire Sciences and Management Minor < University of Montana

Fire Sciences and Management Minor

Minor - Fire Sciences & Management

W.A Franke College of Forestry & Conservation

Degree Specific Credits: 24

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Summary

CODE	TITLE	HOURS
Lower-Division Required Courses		3
Upper-Division Required Courses		3
Ecology Courses		3
Practicum or Planning Course		3
Meteorology or Climate Course		3
Measurements & Analysis Electives		3
Natural/Management Science Electives		3
Social Science Electives		3
Total Hours		24

Course List

Lower-Division Required Course

CODE	TITLE	HOURS
Complete the following course:		
FORS 230	Fire Management & Environmental Change	3
Total Hours		3

Course List

Minimum Required Grade: C-

Upper-Division Required Courses

CODE	TITLE	HOURS
Complete the following course:		
FORS 333	Fire Ecology	3
Total Hours		3

Course List

Minimum Required Grade: C-

Ecology Courses

CODE	TITLE	HOURS
Complete one of the following courses:		3
BIOE 370	General Ecology	
FORS 330	Forest Ecology	
NRSM 462	Rangeland Ecology	
Total Hours		3

Course List

Minimum Required Grade: C-

Practicum or Planning Course

Note: FORS 498 must be approved by fire minor advisor prior to registration and taken for 3 credits

CODE	TITLE	HOURS
Complete one of the following courses:		3
FORS 440	Forest Stand Management	
FORS 495	Wildland RxFire Practicum	
FORS 498	Internship (must be approved by fire minor advisor)	
NRSM 495	Ecosystem Science and Restoration Practicum	
PTRM 485	Recreation Planning	
WILD 480	The Upshot--Appld Wildlife Mgt	
Total Hours		3

Course List

Minimum Required Grade: C-

Meteorology or Climate Course

CODE	TITLE	HOURS
Complete one of the following courses:		
ERTH 303N	Weather and Climate	
NRSM 418	Ecosystem Climatology	
Total Hours		0

Course List

Minimum Required Grade: C-

Measurements & Analysis Electives

CODE	TITLE	HOURS
Complete one of the following courses:		3
FORS 202	Forest Mensuration	
FORS 350	Forestry Apps of GIS	
FORS 351	Env Remote Sensing	
Total Hours		3

Course List

Minimum Required Grade: C-

Natural/Management Science Electives

Rule: Complete one course from the following, but if one of these courses is required for the major a second elective must be taken

CODE	TITLE	HOURS
Complete one of the following courses:		3
BIOE 449	Plant Biogeography	
FORS 331	Wildland Fuel Management	
FORS 347	Multiple Resource Silviculture	
FORS 349	Practice of Silviculture	
GPHY 317	Geomorphology	
NRSM 385	Watershed Hydrology	
NRSM 465	Foundations of Restoration Ecology	
WILD 370	Wildlife Habitat Cons & Mgmt	
Total Hours		3

Course List

Minimum Required Grade: C-

Social Science Electives

Rule: Complete one course from the following, but if one of these courses is required for the major a second elective must be taken

CODE	TITLE	HOURS
Complete one of the following courses:		3
FORS 320	Forest Environmental Economics	
NASX 303E	Ecological Perspectives in Native American Traditions	
NRSM 379	Collab in Nat Res Decisions	
NRSM 389E	Ethics Forestry & Conservation	
NRSM 422	Nat Res Policy/Administration	
PTRM 482	Wilderness & Protected Area Management	
Total Hours		3

Course List

Minimum Required Grade: C-

Wilderness Studies Minor < University of Montana

Wilderness Studies Minor

- Overview
- Requirements

Natalie Dawson, 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 W.A Franke 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

W.A Franke College of Forestry & Conservation

Degree Specific Credits: 25

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Note: This minor can be completed during a
for Honors will be completed with this minc

Upper-Division Required Courses

CODE	TITLE
Complete all of the following courses:	
LIT 373	Lit & Environment
MUSI 304A	Sound in the Natural World
NASX 303E	Ecological Perspectives in Native American Traditions

CODE	TITLE
NRSM 370S	Wildland Conservation Policy/Governance
NRSM 371	Wilderness Issues Lect Series
NRSM 373	Wilderness and Civilization
NRSM 398	Internship
Total Hours	

Course List

Minimum Required Grade: C-

Northern Rockies Outdoor Leadership Certificate < University of Montana

Northern Rockies Outdoor Leadership Certificate

- Overview
- Requirements

The Northern Rockies Outdoor Leadership Certificate is designed through collaboration of multiple University of Montana programs as a certificate to complement any major across campus for students interested in gaining and strengthening leadership skills through engagement in diverse conceptual courses and outdoor field settings. The purpose of the program is to provide undergraduate students or individuals with an undergraduate degree with leadership training and application that can be applied to any professional, academic, and personal setting in their future.

Post-Secondary Certificate - Northern Rockies Outdoor Leadership Certificate

W.A Franke College of Forestry & Conservation

Degree Specific Credits: 15

Required Cumulative GPA: 2.00

Catalog Year: 2019-2020

Summary

CODE	TITLE	HOURS
Theory and Experience		6
Theory		
Experience		
Optional Courses		
Field Courses		6
Internship		3
Total Hours		15

Course List

Theory and Experience

Rule: 6 total credits are required from the categories below. Students must complete at least one course each from the *Theory* and *Experience categories*.

Theory

CODE	TITLE	HOURS
Complete one of the following courses:		3
COMX 210	Communication in Small Groups	
GBLD 220	Models of Leadership	
HTH 465	Leading Health and, Human Perform Orgs	
NRSM 373	Wilderness and Civilization	
PSCI 462	Human Resource Management	
PTRM 217S	Parks & Outdoor Rec. Mgmt.	
PTRM 380	Rec Admin & Leadership	
Total Hours		3

Course List

Minimum Required Grade: C-

Experience

CODE	TITLE	HOURS
Complete one of the following courses:		1
ACT 114	Beginning Rock Climbing	
ACT 175	Fly Fishing	
ACT 176	Fundamentals of Whitewater Rafting	
ACT 177	Fundamentals of Kayaking	
ACT 214	Intermediate Rock Climbing	
Total Hours		1

Course List

Minimum Required Grade: C-

Optional Couses

CODE	TITLE	HOURS
The following courses may be completed to fulfill the 6 credit requirement:		
ECP 102	Wilderness First Aid	1-6
ECP 122	Wilderness First Responder	2
ECP 331	Wilderness EMT	3

Course List

Minimum Required Grade: C-

Field Courses

CODE	TITLE	HOURS
Complete 6 credits of the following courses:		6
NRSM 273	Wilderness/Civ Field Stds	
PTRM 345X	Sustaining Human Soc & Nat Env	
PTRM 353	Tourism, Livelihoods and Sustainability in Mountains	
PTRM 355	Wild. Med. And Risk Mgmt.	
PTRM 356	Wild. Rescue and Survival	
PTRM 418	Winter Wilderness Field Studies	
Total Hours		6

Course List

Minimum Required Grade: C-

Internship

Note: Students are required to do an internship where they can apply their leadership skills with a professional partner. Internships can include on-campus initiatives like the Freshman Wilderness Experience and other student-led trips as well as off-campus internships with local, regional, or global partners. Internships will be approved by the coordinating committee and will be tracked through the W.A. Franke College of Forestry and Conservation.

CODE	TITLE	HOURS
Complete one of the following courses:		3
CHTH 498	Internship	
KIN 498	Internship	
NRSM 498	Internship	
PTRM 398	Internship	
Total Hours		3

Course List

Minimum Required Grade: C-

Water Science and Society Certificate < University of Montana

Water Science and Society Certificate

- Overview
- Requirements

The Water Science and Society Certificate provides students from a range of majors with foundational knowledge in water science and policy. Students take courses in the biological, physical, and policy sciences, and courses focused on skills relevant to understanding and managing water. The certificate culminates in a capstone experience that enables students to apply conceptual water knowledge to a project.

W.A Franke College of Forestry & Conservation

Degree Specific Credits: 15

Required Cumulative GPA: 2.0

Catalog Year: 2019-2020

Summary

CODE	TITLE	HOURS
Social/Policy		3
Physical		3
Biological/Ecological		3
Skills		3
Capstone		3
Total Hours		15

Course List

Social/Policy

CODE	TITLE	HOURS
Complete one of the following courses:		3
NRSM 427	Advanced Water Policy	
GPHY 335	Water Policy	
Total Hours		3

Course List

Minimum Required Grade: C-

Physical

CODE	TITLE	HOURS
Complete one of the following courses:		3
GEO 320	Global Water	
GEO 420	Hydrogeology	
GEO 421	Hydrology	
NRSM 385	Watershed Hydrology	
Total Hours		3

Course List

Course List

Minimum Required Grade: C-

CODE	TITLE	HOURS

Helena College University of Montana < University of Montana

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 (406) 447-6900.

Montana Tech of The University of Montana < University of Montana

Montana Tech of The University of Montana

Opening its doors in 1900 as the Montana School of Mines, Montana Tech has a century-old reputation as one of the finest science and engineering universities in the nation. Early curricula at the Montana State School of Mines were designed around mining and electrical engineering.

Today, Montana Tech specializes in the areas of science, technology, engineering, math, and healthcare disciplines and has repeatedly been recognized among the top 10% of all universities in America. Enrollment on campus sits at 2,945 students on its two campuses. The university offers 13 certificate programs, 14 associate degrees, 25 undergraduate programs, 10 masters programs, and a doctoral program in Materials Science. The north campus offers four-year and graduate degrees while the south campus, Highlands College, offers associate degrees and certificate programs, continuing education, and customized training.

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 university high marks for its quality of student life. The student body presents a national and global snapshot with 43 states and 24 foreign countries represented.

Montana Tech emphasizes teamwork, collaboration, and hands-on learning and has a long-standing reputation for producing outstanding graduates. For the past 10 years, Montana Tech graduates have enjoyed a 92% placement rate, including acceptance into professional and graduate programs, and graduates from our School of Mines report an average starting salary of $66,186. Many of the university s alumni have attained senior leadership positions in the minerals, energy, and natural resource industries as well as business. Over 16% of Montana Tech alumni give back to the campus each 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 and another $12.5 million currently under construction, the campus blends its historical buildings with new state-of the-art laboratory and instructional facilities. Highlands College is located seven miles south of the main campus.

The Montana Bureau of Mines and Geology, Montana's geologic and hydrogeologic research arm, is housed on the campus of Montana Tech. Montana Tech's commitment to research is evident in significant recent investments in major instrumentation, support for creative scholarship by faculty and graduate students, and a vibrant undergraduate research program.

Inquiries to Montana Tech should be directed to 1-800-445-Tech or visit the Montana Tech website.

The University of Montana Western < University of Montana

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 visit the University of Montana Western website or call (877) 683-7331.

Administration

Contacts

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

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 2019-2020 Calendar

The 2019-2020 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.

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 Montana University System - Mission < University of Montana

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 Officers

2019-2020 Academic Year

Montana Board of Regents of Higher Education

- Joyce Dombrouski - Missoula
- Casey Lozar - Helena (Chair)
- John Miller (Student Regent) - Missoula
- Robert A. Nystuen - Lakeside
- Brianne Roger - Bozeman
- Martha Sheehy - Billings
- Paul Tuss (Vice Chair) - Havre

Ex Officio Members

- Clayton Christian, Commissioner of Higher Education (ex-officio)
- Steve Bullock, Governor (ex-officio)
- Elise Arntzen, Superintendent of Public Instruction (ex-officio)

President's Cabinet

- Seth Bodner, M.S. - President
- Jon Harbor, Ph. D. Executive Vice President and Provost
- Lucy France, J.D. Legal Counsel
- Kent Haslam, M.Ed. Athletic Director
- Karen Kracher Dykstra, Interim director of Alumni Relations President/CEO, University of Montana Alumni Association
- Vice President for Administration and Finance
- Renae Scott, M.B.A. Chief Information Officer
- Associate Vice President for Integrated Communications and Chief Marketing Officer
- Paula Short, M.A. - Director of Communications
- Jessica Weltman, J.D. Director, Equal Opportunity and Affirmative Action Office
- Scott Wittenburg, Ph.D. Vice President for Research and Creative Scholarship and Dean of the Graduate School
- Cathy Cole, Vice President for Enrollment Management and Strategic Communication
- Paul Lasiter, Vice President for Operations and Finance
- Alicia Arant, Equal Opportunity and Affirmative Action Interim Director, Title IX Coordinator
- Shane Giese, M.B.A. President/CEO, University of Montana Foundation

Academic Officers

- Denise Dowling, M.A. - Dean, School of Journalism
- Jenny McNulty, Ph.D. - Interim Dean, College of Humanities and Sciences
- Tom DeLuca, Ph.D. - Dean, College of Forestry and Conservation
- Adrea Lawrence, Ph.D. - Dean, Phyllis J. Washington College of Education
- Reed Humphrey, Ph.D. - Dean, College of Health Professions and Biomedical Sciences
- Joseph Hickman, M.A. - Registrar

University Of Montana

- Paul Kirgis, J.D. - Dean, School of Law
- John DeBoer, M.F.A. - Interim Dean, College of Visual and Performing Arts
- Nathan Lindsay, Ph.D. - Associate Provost for Dynamic Learning
- Nathan Lindsay, Ph.D. - Dean, School of Extended and Lifelong Learning
- Thomas Gallagher, Ph.D. - Dean, Missoula College
- Suzanne Tilleman, - Interim Dean, School of Business Administration
- Tim Nichols Ph.D. - Dean, Davidson Honors College
- Director, Global Engagement Office
- Barry Brown M.S. - Interim Dean, Mansfield Library
- Sarah Swager, Ph.D. - Vice Provost for Student Success

University of Montana - Missoula Strategic Goals < University of Montana

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.

University of Montana Missoula - Mission < University of Montana

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.

Accounting (ACTG)

ACTG 100 - Essentials of Accounting. 4 Credits.

Offered autumn and spring. Offered at Missoula College. 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. 4 Credits.

Offered autumn and spring. Offered at Missoula College. 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. 4 Credits.

Offered spring. Offered at Missoula College. Prereq., ACTG 101. 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 flows. Also includes an introduction to QuickBooks.

ACTG 180 - Payroll Accounting. 3 Credits.

Offered autumn and spring. Offered at Missoula College. Payroll Topics including Federal and Montana state payroll tax law. The course includes study of workers compensation, independent contractor determination and registration, preparation of payroll, payroll tax returns and deposits, and annual information payroll returns. Students will also be exposed to federal law affecting payroll such as Fair Labor Standards Act, ADA, Family Medical Leave Act, Civil Rights Act, etc. and applicable Montana state laws.

ACTG 191 - Special Topics. 1-6 Credits.

ACTG 192 - Independent Study. 1-9 Credits.

Offered at Missoula College. Course material appropriate to the needs and objectives of the individual student.

ACTG 201 - Principles of Financial Accounting. 3 Credits.

Offered every term. Prereq. or Coreq. 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 Managerial Accounting. 3 Credits.

Offered every term. Prereq., ACTG 201 and M 115, M 121, M 151 or M 162. Continuation of ACTG 201 with a focus on managerial accounting topics.

ACTG 211 - Income Tax Fundamentals. 4 Credits.

Offered autumn. Offered at Missoula College. 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. 3 Credits.

Offered spring. Offered at Missoula College. Prereq., ACTG 101 and 102 or consent of instructor. Principles of accounting for governmental units, health care organizations, colleges and universities, and other nonprofit organizations.

ACTG 250 - Accounting Capstone. 4 Credits.

Offered Spring. Offered at Missoula College. Prereq., ACTG 101-102 or ACTG 202 and ACTG 180, or equivalent and consent of instructor. A culmination to all course work done in accounting core; this is a preparation class for the accounting workplace. Course will utilize accounting software to apply learned technical skills. This course requires completion of a comprehensive practice set in financial accounting, ratio analysis and spreadsheet utilization. This course also serves to sharpen students' writing, presenting and critical thinking skills.

ACTG 291 - Special Topics. 1-6 Credits.

(R-6) Offered intermittently. Offered at Missoula College. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

ACTG 292 - Independent Study. 1-3 Credits.

ACTG 298 - Internship. 1-3 Credits.

(R-3) Offered autumn and spring. Offered on Mountain Campus and at Missoula College. 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.

ACTG 304 - Accounting Lab. 1 Credit.

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. This is the first course for those students taking intermediate accounting courses.

ACTG 305 - Corporate Reporting I. 3 Credits.

Offered every term. Prereq., ACTG 201 with a grade of C or better; prereq., or corereq., ACTG 202 with grade of C or better. Topics include concepts in financial accounting, assets and related income statement accounts.

ACTG 306 - Corporate Reporting II. 3 Credits.

Offered every term. Prereq., junior standing in Business, ACTG 202 and ACTG 305 with a grade 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. 3 Credits.

Offered spring. Prereq., junior standing in Business and 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. 3 Credits.

Offered autumn. Prereq., junior standing in Business. Provides thorough understanding of business processes, risks, and internal controls. Computer applications may be used to demonstrate concepts.

ACTG 391 - Special Topics. 1-9 Credits.

(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. 1-6 Credits.

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

ACTG 394 - Undergraduate Seminar. 1-6 Credits.

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

ACTG 401 - Federal Income Taxation. 3 Credits.

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. 3 Credits.

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. 3 Credits.

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. 3 Credits.

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 and Local Government Accounting. 2 Credits.

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. 1 Credit.

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. 1 Credit.

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.

ACTG 491 - Special Topics. 1-9 Credits.

(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. 1-6 Credits.

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

ACTG 494 - Seminar. 1-6 Credits.

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

ACTG 498 - Internship. 1-3 Credits.

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.

ACTG 509 - Financial Rptg & Control. 3 Credits.

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. 2 Credits.

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 610 - Accounting & Data Analytics. 3 Credits.

Offered autumn. Blended course. Prereq., ACTG 306 or consent of instructor. An exploratory, high-level study of issues surrounding data and data analysis in accounting using large data sets to become an intelligent data consumer, data user, and information communicator as a professional accountant.

ACTG 615 - Accounting Theory. 3 Credits.

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. 3 Credits.

Offered fall or spring. Prerq., 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. 3 Credits.

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. 1 Credit.

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. 3 Credits.

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. 2-3 Credits.

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. 3 Credits.

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. 1-4 Credits.

(R-4) Offered spring and/or first summer session. Open to MAcct students in good standing with instructor's consent who are taking their last required accounting courses. 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. 1-3 Credits.

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

ACTG 695 - Special Topics. 1-9 Credits.

ACTG 696 - Independent Study. 1-9 Credits.

(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

ACTG 698 - Internship. 1-3 Credits.

(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. Written reports required. Level: Graduate

ACTG 699 - Thesis. 1-6 Credits.

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

Activities (ACT)

ACT 101 - Stretch and Relax. 1 Credit.

(R-4)

ACT 103 - Jump Rope Fitness and Skill. 1 Credit.

Offered every term. Students may include up to but not more than 4 credits earned in HHP 100-179 activity courses in the total number of credits required for graduation. Students graded Credit/No Credit based on participation and a strict attendance policy. For a complete list of all classes offered go to the HHP Activity Program website.

ACT 105 - Aerobic Fitness. 1 Credit.

Offered every term. Students may include up to but not more than 4 credits earned in HHP 100-179 activity courses in the total number of credits required for graduation. Students graded Credit/No Credit based on participation and a strict attendance policy. For a complete list of all classes offered go to the HHP Activity Program website.

ACT 106 - Beg Conditioning and Fitness. 1 Credit.

Offered every term. Students may include up to but not more than 4 credits earned in HHP 100-179 activity courses in the total number of credits required for graduation. Students graded Credit/No Credit based on participation and a strict attendance policy. For a complete list of all classes offered go to the HHP Activity Program website.

ACT 107 - Beginning Aerobic Dance. 1 Credit.

Offered every term. Students may include up to but not more than 4 credits earned in HHP 100-179 activity courses in the total number of credits required for graduation. Students graded Credit/No Credit based on participation and a strict attendance policy. For a complete list of all classes offered go to the HHP Activity Program website.

ACT 109 - Beginning Racquetball. 1 Credit.

Offered every term. Students may include up to but not more than 4 credits earned in HHP 100-179 activity courses in the total number of credits required for graduation. Students graded Credit/No Credit based on participation and a strict attendance policy. For a complete list of all classes offered go to the HHP Activity Program website.

ACT 110 - Beginning Weight Training. 1 Credit.

Offered every term. Students may include up to but not more than 4 credits earned in activity courses (ACT 100-287) in the total number of credits required for graduation. Students graded Credit/No Credit based on participation and a strict attendance policy. For a complete list of all classes offered go to the HHP Activity Program website.

ACT 111 - Beg Weight Training - Women. 1 Credit.

ACT 112 - Curling. 1 Credit.

(R-4) Students will learn the curling rules, scoring, etiquette, basic strategies, methods and styles of stone deliver. In addition, how to "read' the ice/call for sweeping, most effective sweeping techniques, and the different positions on a curling team will be taught.

ACT 114 - Beginning Rock Climbing. 1 Credit.

Offered every term. Students may include up to but not more than 4 credits earned in HHP 100-179 activity courses in the total number of credits required for graduation. Students graded Credit/No Credit based on participation and a strict attendance policy. For a complete list of all classes offered go to the HHP Activity Program website.

ACT 123 - Freestone Bouldering. 1 Credit.

ACT 124 - Flow Arts. 1 Credit.

ACT 125 - Acro Yoga. 1 Credit.

ACT 128 - Aerial Arts Fundamentals. 1 Credit.

ACT 129 - Circuit Training. 1 Credit.

(R-4) Upon completing this course, the student will be able to develop their strength, endurance, and flexibility by participating in various fitness programs or sports, demonstrate proper form and skills for various fitness programs, and recognize and demonstrate appropriate fitness etiquette.

ACT 130 - Pole Fitness & Dance. 1 Credit.

Learn basic turns, spins and strengthening techniques to mount and climb the pole. Create dance combinations and learn tricks and poses that are broken down into comprehensive step-by-step instructions. Delve deeper into inversions and combinations, as well as expand on skills and tricks.

ACT 136 - Aerial Yoga. 1 Credit.

(R-4) This course teaches traditional Hatha yoga with an aerial hammock, aiding the student in postures. In order to accumulate a person who is new to yoga, the aerial hammock offers the body assistance to find correct alignment and decompression of the spine without pressure on the head or hands.

ACT 137 - Capoeira Angola. 1 Credit.

Students will learn the basic elements of Capoeira Angola as a game, rather than the mainstream advertised martial art. Through this practice, we will train the brain and the body to use intuition as a source of choice making. We will push to accelerate of what to do, deciding to do, and doing it.

ACT 138 - Olympic-Style Weightlifting. 1 Credit.

Offered every term. Students may include up to but not more than 4 credits earned in HHP 100-179 activity courses in the total number of credits required for graduation. Students graded Credit/No Credit based on participation and a strict attendance policy. For a complete list of all classes offered go to the HHP Activity Program website.

ACT 139 - Parkour. 1 Credit.

(R-4) Offered every term. Students may include up to but not more than 4 credits earned in HHP 100-179 activity courses in the total number of credits required for graduation. Students graded Credit/No Credit based on participation and a strict attendance policy. For a complete list of all classes offered go to the HHP Activity Program website.

ACT 140 - Beginning Basketball. 1 Credit.

Offered every term. Students may include up to but not more than 4 credits earned in HHP 100-179 activity courses in the total number of credits required for graduation. Students graded Credit/No Credit based on participation and a strict attendance policy. For a complete list of all classes offered go to the HHP Activity Program website.

ACT 143 - Beginning Table Tennis. 1 Credit.

Offered every term. Students may include up to but not more than 4 credits earned in HHP 100-179 activity courses in the total number of credits required for graduation. Students graded Credit/No Credit based on participation and a strict attendance policy. For a complete list of all classes offered go to the HHP Activity Program website.

ACT 145 - Beginning Dodgeball. 1 Credit.

Offered every term. Students may include up to but not more than 4 credits earned in HHP 100-179 activity courses in the total number of credits required for graduation. Students graded Credit/No Credit based on participation and a strict attendance policy. For a complete list of all classes offered go to the HHP Activity Program website.

ACT 146 - Beginning Golf. 1 Credit.

Offered every term. Students may include up to but not more than 4 credits earned in HHP 100-179 activity courses in the total number of credits required for graduation. Students graded Credit/No Credit based on participation and a strict attendance policy. For a complete list of all classes offered go to the HHP Activity Program website.

ACT 147 - Oula Fitness. 1 Credit.

Offered every term. Students may include up to but not more than 4 credits earned in 100-179 activity courses in the total number of credits required for graduation. Students graded Credit/No Credit based on participation and a strict attendance policy.

ACT 150 - Beginning Yoga. 1 Credit.

Offered every term. Students may include up to but not more than 4 credits earned in HHP 100-179 activity courses in the total number of credits required for graduation. Students graded Credit/No Credit based on participation and a strict attendance policy. For a complete list of all classes offered go to the HHP Activity Program website.

ACT 151 - Beginning Billiards. 1 Credit.

Offered every term. Students may include up to but not more than 4 credits earned in HHP 100-179 activity courses in the total number of credits required for graduation. Students graded Credit/No Credit based on participation and a strict attendance policy. For a complete list of all classes offered go to the HHP Activity Program website.

ACT 152 - Beginning Handball. 1 Credit.

Offered every term. Students may include up to but not more than 4 credits earned in HHP 100-179 activity courses in the total number of credits required for graduation. Students graded Credit/No Credit based on participation and a strict attendance policy. For a complete list of all classes offered go to the HHP Activity Program website.

ACT 154 - Beginning Tai Qi. 1 Credit.

Offered every term. Students may include up to but not more than 4 credits earned in HHP 100-179 activity courses in the total number of credits required for graduation. Students graded Credit/No Credit based on participation and a strict attendance policy. For a complete list of all classes offered go to the HHP Activity Program website.

ACT 156 - Beginning Aikido. 1 Credit.

ACT 157 - Beginning Martial Arts. 1 Credit.

Offered every term. Students may include up to but not more than 4 credits earned in HHP 100-179 activity courses in the total number of credits required for graduation. Students graded Credit/No Credit based on participation and a strict attendance policy. For a complete list of all classes offered go to the HHP Activity Program website.

ACT 158 - Beginning Taekwondo. 1 Credit.

Offered every term. Students may include up to but not more than 4 credits earned in HHP 100-179 activity courses in the total number of credits required for graduation. Students graded Credit/No Credit based on participation and a strict attendance policy. For a complete list of all classes offered go to the HHP Activity Program website.

ACT 163 - 5/10 K Race Training. 1 Credit.

Offered every term. Students may include up to but not more than 4 credits earned in HHP 100-179 activity courses in the total number of credits required for graduation. Students graded Credit/No Credit based on participation and a strict attendance policy. For a complete list of all classes offered go to the HHP Activity Program website.

ACT 169 - Beginning Tennis. 1 Credit.

Offered every term. Students may include up to but not more than 4 credits earned in HHP 100-179 activity courses in the total number of credits required for graduation. Students graded Credit/No Credit based on participation and a strict attendance policy. For a complete list of all classes offered go to the HHP Activity Program website.

ACT 170 - Beginning Swimming. 1 Credit.

Offered every term. Students may include up to but not more than 4 credits earned in HHP 100-179 activity courses in the total number of credits required for graduation. Students graded Credit/No Credit based on participation and a strict attendance policy. For a complete list of all classes offered go to the HHP Activity Program website.

ACT 171 - Physical Fitness I. 1 Credit.

Offered every term. Students may include up to but not more than 4 credits earned in HHP 100-179 activity courses in the total number of credits required for graduation. Students graded Credit/No Credit based on participation and a strict attendance policy. For a complete list of all classes offered go to the HHP Activity Program website.

ACT 172 - Physical Fitness II. 1 Credit.

Offered every term. Students may include up to but not more than 4 credits earned in HHP 100-179 activity courses in the total number of credits required for graduation. Students graded Credit/No Credit based on participation and a strict attendance policy. For a complete list of all classes offered go to the HHP Activity Program website.

ACT 173 - Beg Fly Fishing/Fly Tying. 1 Credit.

Offered every term. Students may include up to but not more than 4 credits earned in HHP 100-179 activity courses in the total number of credits required for graduation. Students graded Credit/No Credit based on participation and a strict attendance policy. For a complete list of all classes offered go to the HHP Activity Program website.

ACT 174 - Introduction to Backpacking. 1 Credit.

Offered every term. Students may include up to but not more than 4 credits earned in HHP 100-179 activity courses in the total number of credits required for graduation. Students graded Credit/No Credit based on participation and a strict attendance policy. For a complete list of all classes offered go to the HHP Activity Program website.

ACT 175 - Fly Fishing. 1 Credit.

Offered every term. Students may include up to but not more than 4 credits earned in HHP 100-179 activity courses in the total number of credits required for graduation. Students graded Credit/No Credit based on participation and a strict attendance policy. For a complete list of all classes offered go to the HHP Activity Program website.

ACT 176 - Fundamentals of Whitewater Rafting. 1 Credit.

Offered every term. Students may include up to but not more than 4 credits earned in HHP 100-179 activity courses in the total number of credits required for graduation. Students graded Credit/No Credit based on participation and a strict attendance policy. For a complete list of all classes offered go to the HHP Activity Program website.

ACT 177 - Fundamentals of Kayaking. 1 Credit.

Offered every term. Students may include up to but not more than 4 credits earned in HHP 100-179 activity courses in the total number of credits required for graduation. Students graded Credit/No Credit based on participation and a strict attendance policy. For a complete list of all classes offered go to the HHP Activity Program website.

ACT 191 - Special Topics. 1-6 Credits.

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

ACT 202 - Intermediate Racquetball. 1 Credit.

An intermediate course for the sport of racquetball. Students should have a fundamental understanding of the sport, including the rules of the game and its variations, and the necessary equipment. Intermediate-level instruction will focus more on stroke mechanics, and strategies. Students will also be learning the enjoyment of playing racquetball, which is a game that can last a lifetime.

ACT 207 - WC Aerobics. 1 Credit.

Offered every term. Students may include up to but not more than 4 credits earned in HHP 100-179 activity courses in the total number of credits required for graduation. Students graded Credit/No Credit based on participation and a strict attendance policy. For a complete list of all classes offered go to the HHP Activity Program website.

ACT 210 - Intermediate Weight Training. 1 Credit.

(R-4) Students may include up to but not more than 4 credits earned in activity courses in the total number of credits required for graduation. Students graded Credit/No Credit based on participation and a strict attendance policy. For a complete list of all classes offered go to the HHP Activity Program website.

ACT 214 - Intermediate Rock Climbing. 2 Credits.

ACT 215 - AMGA Climbing Wall Instructor. 1 Credit.

This course will address the technical skills necessary to manage an instructional program at an indoor climbing wall facility and will address the following general topic areas: instructor roles, responsibilities and professionalism, client orientation and instruction, risk management, lesson planning, teaching basic climbing skills, including movement, teaching lead climbing skills, teaching top-rope and lead belaying techniques, use of available equipment and facility, basic rescue and emergency procedures.

ACT 218 - Ultimate Disc. 1 Credit.

Offered every term. Students may include up to but not more than 4 credits earned in HHP 100-179 activity courses in the total number of credits required for graduation. Students graded Credit/No Credit based on participation and a strict attendance policy. For a complete list of all classes offered go to the HHP Activity Program website.

ACT 222 - Ski Camp. 1 Credit.

Offered every term. Students may include up to but not more than 4 credits earned in HHP 100-179 activity courses in the total number of credits required for graduation. Students graded Credit/No Credit based on participation and a strict attendance policy. For a complete list of all classes offered go to the HHP Activity Program website.

ACT 225 - Snow Bowl Ski Area. 1 Credit.

Offered every term. Students may include up to but not more than 4 credits earned in HHP 100-179 activity courses in the total number of credits required for graduation. Students graded Credit/No Credit based on participation and a strict attendance policy. For a complete list of all classes offered go to the HHP Activity Program website.

ACT 228 - Ski Instructor's Preparation. 2 Credits.

Offered spring. Prereq., consent of instr. Open to all students with advanced to expert skiing skills. Techniques of teaching skiing including: skill concepts and contemporary skiing movements; teaching cycle; movement analysis; personal skiing improvement. Prepares student for certification with (PSIA) Professional Ski Instructors of America.

ACT 229 - Snowboard Instructor Prep. 2 Credits.

Offered spring. Prereq., consent of instr. Open to students with advanced to expert riding skills. Techniques of teaching snowboarding including: skill concepts and contemporary snowboarding movements; teaching cycle; movement analysis; personal riding improvement. Prepares student for certification with (ASSI) American Association of Snowboard Instructors.

ACT 231 - Pilates - Yoga Fusion. 1 Credit.

Offered every term. Students may include up to but not more than 4 credits earned in HHP 100-179 activity courses in the total number of credits required for graduation. Students graded Credit/No Credit based on participation and a strict attendance policy. For a complete list of all classes offered go to the HHP Activity Program website.

ACT 232 - Argentine Tango. 1 Credit.

Offered every term. Students may include up to but not more than 4 credits earned in HHP 100-179 activity courses in the total number of credits required for graduation. Students graded Credit/No Credit based on participation and a strict attendance policy. For a complete list of all classes offered go to the HHP Activity Program website.

ACT 233 - Freestone Climbing. 1 Credit.

Offered every term. This course is a free climb, no ropes course. Students may include up to but not more than 4 credits earned in HHP 100-179 activity courses in the total number of credits required for graduation. Students graded Credit/No Credit based on participation and a strict attendance policy. For a complete list of all classes offered go to the HHP Activity Program website.

ACT 235 - Belly Dancing. 1 Credit.

Offered every term. Students may include up to but not more than 4 credits earned in HHP 100-179 activity courses in the total number of credits required for graduation. Students graded Credit/No Credit based on participation and a strict attendance policy. For a complete list of all classes offered go to the HHP Activity Program website.

ACT 237 - Trampoline Arial Acrobatics. 1 Credit.

Offered every term. Students may include up to but not more than 4 credits earned in HHP 100-179 activity courses in the total number of credits required for graduation. Students graded Credit/No Credit based on participation and a strict attendance policy. For a complete list of all classes offered go to the HHP Activity Program website.

ACT 250 - Pilates. 1 Credit.

Offered every term. Students may include up to but not more than 4 credits earned in HHP 100-179 activity courses in the total number of credits required for graduation. Students graded Credit/No Credit based on participation and a strict attendance policy. For a complete list of all classes offered go to the HHP Activity Program website.

ACT 257 - Martial Arts and Self Defense. 1 Credit.

Offered every term. Students may include up to but not more than 4 credits earned in HHP 100-179 activity courses in the total number of credits required for graduation. Students graded Credit/No Credit based on participation and a strict attendance policy. For a complete list of all classes offered go to the HHP Activity Program website.

ACT 259 - AAK American Kenpo. 1 Credit.

Offered every term. Students may include up to but not more than 4 credits earned in HHP 100-179 activity courses in the total number of credits required for graduation. Students graded Credit/No Credit based on participation and a strict attendance policy. For a complete list of all classes offered go to the HHP Activity Program website.

ACT 271 - Swimming for Fitness. 1 Credit.

Offered every term. Students may include up to but not more than 4 credits earned in HHP 100-179 activity courses in the total number of credits required for graduation. Students graded Credit/No Credit based on participation and a strict attendance policy. For a complete list of all classes offered go to the HHP Activity Program website.

ACT 274 - Scuba Diving. 1 Credit.

Offered every term. Students may include up to but not more than 4 credits earned in HHP 100-179 activity courses in the total number of credits required for graduation. Students graded Credit/No Credit based on participation and a strict attendance policy. For a complete list of all classes offered go to the HHP Activity Program website.

ACT 286 - Fencing. 1 Credit.

Offered every term. Students may include up to but not more than 4 credits earned in HHP 100-179 activity courses in the total number of credits required for graduation. Students graded Credit/No Credit based on participation and a strict attendance policy. For a complete list of all classes offered go to the HHP Activity Program website.

ACT 287 - Strength & Flexibility. 1 Credit.

Offered every term. Students may include up to but not more than 4 credits earned in HHP 100-179 activity courses in the total number of credits required for graduation. Students graded Credit/No Credit based on participation and a strict attendance policy. For a complete list of all classes offered go to the HHP Activity Program website.

ACT 291 - Special Topics. 1-6 Credits.

(R-6) Offered intermittently. Offerings of visiting professors, new courses, or current topics.

ACT 292 - Independent Study. 1-6 Credits.

(R-6) Offered every term. Prereq., consent of advisor and instr. Course material appropriate to the needs and objectives of the individual student.

ACT 391 - Special Topics. 1-6 Credits.

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

ACT 490 - Undergraduate Research. 1-3 Credits.

(R-6) Offered every term. Prereq., consent of instr. Directed individual research and study appropriate to the background and objectives of the student.

ACT 491 - Special Topics. 1-6 Credits.

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

ACT 492 - Independent Study. 1-3 Credits.

(R-6) Offered every term. Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student.

ACT 494 - Workshop. 1-6 Credits.

(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.

ACT 498 - Internship. 2-6 Credits.

(R-6) Offered every term. Prereq. all HHP options minimum junior standing and ECP 120/121 (or equivalent). Prereqs per option. Exercise Science Applied: KIN 320/321. If internship is coaching or strength & conditioning must also have completed KIN 410 and COA 405. Exercise Science Pre-Professional: KIN 320/321. If internship is cardiac rehab must also have completed KIN 460/483/484. Community Health: CHTH 335. Supervised field experiences with private businesses, public agencies, or institutions. 45 hours of internship site work = 1 credit. A maximum of 6 credits of Internship 498 may count toward graduation. Students should not be registered for more than 14 credits their internship semester.

ACT 499 - Capstone. 1-3 Credits.

(R-6) Offered every term. Prereq., consent of instr. Independent work under the University omnibus option. See index.

Activities - Varsity (ACTV) < University of Montana

Activities - Varsity (ACTV)

ACTV 189 - Varsity Athletics. 1 Credit.

Offered every term. Students may include up to but not more than 4 credits earned in HHP 100-179 activity courses in the total number of credits required for graduation. Students graded Credit/No Credit based on participation and a strict attendance policy. For a complete list of all classes offered go to the HHP Activity Program website.

Administrative Management (AMGT)

AMGT 145 - Records Management. 2 Credits.

Offered every term. Offered at Missoula College. 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. 1-9 Credits.

(R-9) Offered intermittently. Offered at Missoula College. Course material appropriate to the needs and objectives of the individual student.

AMGT 198 - Internship. 1-6 Credits.

(R-6) 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.

AMGT 240 - Admin Support for the Office. 3 Credits.

Offered autumn. Offered at Missoula College. Prereq., CAPP 154. 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.

AMGT 291 - Special Topics. 1-6 Credits.

(R-6) Offered intermittently. Offered at Missoula College. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

AMGT 298 - Adm Mgmt Internship. 2 Credits.

Offered autumn and spring. Offered at Missoula College. 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. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation.

African-American Studies (AAST)

AAST 141H - Black: From Africa to Hip-Hop. 3 Credits.

Offered annually. 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.

Gen Ed Attributes: Historical Studies, Cultural Intl Diversity (X)

AAST 208H - Africa: From Ancient Egypt to Apartheids Origin. 3 Credits.

Offered intermittently. 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.

Gen Ed Attributes: Historical Studies

AAST 260 - African Americans and Native Americans. 3 Credits.

Offered intermittently. 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.

AAST 291 - Special Topics. 1-12 Credits.

(R-12) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

AAST 372 - African-American Identity. 3 Credits.

Offered intermittently. Interdisciplinary course designed to explore and illuminate the multifaceted nature and development of African-American group and individual identity.

AAST 391 - Special Topics. 1-6 Credits.

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

AAST 392 - Independent Study. 1-9 Credits.

(R-9) Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student.

AAST 491 - Special Topics. 1-6 Credits.

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

AAST 492 - Independent Study. 1-9 Credits.

(R-9) Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student.

AAST 499 - Capstone/Thesis. 1-6 Credits.

(R-6) Prereq., consent of instr.

Allied Health Medical Assist (AHMA)

AHMA 191 - Special Topics. 1-6 Credits.

(R-6) Offered intermittently. Offered at Missoula College. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

AHMA 201 - Med Asst Clinical Prcdrs I. 4 Credits.

Offered autumn. Offered at Missoula College. 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.

AHMA 203 - Med Asst Clinical Prcdrs II. 4 Credits.

Offered spring. Offered at Missoula College. Prereq., AHMA 201. This course builds on skills learned in AHMA 201 and includes body systems and pathophysiology review, and development of skills in the following areas: immunization administration, specimen collection, CLIA waived lab testing, care of lab equipment, spirometry, electrocardiogram, and phlebotomy.

AHMA 260 - Med Assist Lab 1. 2 Credits.

Offered at Missoula College. Coreq., 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. 2 Credits.

Offered at Missoula College. Prereq., AHMA 201 and 260. Corereq., AHMA 203. This course builds on skills learned in AHMA 260 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 280 - Medical Assisting Exam Prep. 3 Credits.

Offered at Missoula College. This course is designed for students completing the Medical Assisting Program. The primary objective and focus will be preparing students for AMT (American Medical Technologists) for a Registered Medical Assistant Credential.

AHMA 291 - Special Topics. 1-6 Credits.

(R-6) Offered intermittently. Offered at Missoula College. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

AHMA 298 - Medical Assisting Externship. 5 Credits.

Offered spring. Offered at Missoula College. 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 20 hours per week for 10 weeks, for a total of 200 hours in assigned clinical rotations.

Allied Health Medical Support (AHMS)

AHMS 108 - Health Data Content & Struct. 2 Credits.

Offered spring. Offered at Missola College. 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.

AHMS 144 - Medical Terminology. 3 Credits.

Offered every term. Offered at Missoula College. Introduction to a medical word building system using Greek and Latin word roots, combining forms, suffixes, and prefixes.

AHMS 156 - Medical Billing Fundamentals. 3 Credits.

Offered at Missoula College. Prereq. or coreq., AHMS 220 or consent of instructor. An introduction to insurance claim processing for the major medical insurance programs. Students will be provided with a basic knowledge of CPT and ICD-10 procedural and diagnostic coding. Emphasis on completing universal insurance forms to maximize reimbursement as well as troubleshoot denied or underpaid claims.

AHMS 160 - Beginning Procedural Coding. 3 Credits.

Offered at Missoula College. Prereq., AHMS 156 and BIOH 112 or consent of instructor. Foundation for utilizing the CPT coding system to increase compatibility and comparability of medical data among users and providers.

AHMS 164 - AHMS 164 Beginning Diagnosis Coding: ICD-10. 3 Credits.

Offered at Missoula College. Prereq., AHMS 156 and BIOH 112. 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 175 - Medical Law & Ethics. 2 Credits.

Offered at Missola College. 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.

AHMS 191 - Special Topics. 1-6 Credits.

(R-6) Offered intermittently. Offered at Missoula College. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

AHMS 192 - Independent Study. 1-9 Credits.

Offered at Missoula College. Course material appropriate to the needs and objectives of the individual student.

AHMS 212 - CPT Coding. 3 Credits.

Offered at Missoula College. Prereq., 160 and AHMS 201 (taken through Great Falls-MSU) or consent of instructor. 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. 3 Credits.

Offered at Missoula College. Prereq., AHMS 164 and AHMS 201 (taken at Great Falls-MSU). 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. 3 Credits.

Offered at Missoula College. 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. 4 Credits.

Offered at Missoula College. 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.

AHMS 245 - Simulated Lab. 3 Credits.

Offered Spring. Offered at Missoula College. Prereq., consent of instructor. 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. 3 Credits.

Offered at Missoula College. Prereq., or coreq. AHMS 156 and AHMS 220; or consent of instructor. 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 270E - Medical Ethics. 3 Credits.

Offered every term. Offered at Missoula College. Ethical decision-making tools for addressing common ethical issues in the health professions.

Gen Ed Attributes: Ethical & Human Values Course

AHMS 291 - Special Topics. 1-6 Credits.

(R-6) Offered intermittently. Offered at Missoula College. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

AHMS 292 - Independent Study. 1-6 Credits.

(R-6) Offered intermittently. Offered at Missoula College. Course material appropriate to the needs and objectives of the individual student.

AHMS 298 - Medical Info Internship. 3 Credits.

Offered at Missoula College. Prereq., enrolled in final semester in program, minimum of "C" in Allied Health Medical Support courses, and recommendation of program director. On-the-job training in positions related to each student's career goal in the medical office field. This experience increases students' skills, prepares them for initial employment, and increases occupational awareness and professionalism. Students work a minimum of 135 hours at an approved site and attend a scheduled one-hour seminar.

Allied Health Respiratory Care (AHRC) < University of Montana

Allied Health Respiratory Care (AHRC)

AHRC 101 - Communication Management. 1 Credit.

Offered autumn. Offered at Missoula College. 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 129 - Patient Care & Assessment. 4 Credits.

Offered autumn. Offered at Missoula College. 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.

AHRC 131 - Resp Care Fundamentals I. 5 Credits.

Offered autumn. Offered at Missoula College. 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. Introduction to airway pharmacology. Principles of basic chemistry introduced with an application to pharmacology as related to the pulmonary system.

AHRC 132 - Respiratory Care Fundamentals II. 3 Credits.

Offered spring. Offered at Missoula College. Prereq., AHRC 131. Study of the indications, rationale, methods, instrumentation, and analysis of Blood Gases. Emphasis will be placed on the physiology and clinical implications of acid-base abnormalities. Cardiovascular and related pharmacology studied in preparation for ACLS and ventilator management. Microbiology in relation to equipment processing, pulmonary rehabilitation, respiratory care in alternative settings, patient education, and health promotion.

AHRC 150 - Respiratory Care Lab I. 1 Credit.

Offered autumn. Offered at Missoula College. 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.

AHRC 191 - Special Topics. 1-6 Credits.

Offered at Missoula College.

AHRC 231 - Resp Crit Care. 4 Credits.

Offered spring. Offered at Missoula College. Continuation of AHRC 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.

AHRC 232 - Resp Path & Disease. 3 Credits.

Offered spring. Offered at Missoula College. 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.

AHRC 235 - Cardiopulm Anat & Phys. 3 Credits.

Offered spring. Offered at Missoula College. 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.

AHRC 243 - Perinat & Pediat Res Care. 3 Credits.

Offered autumn. Offered at Missoula College. 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.

AHRC 250 - Respiratory Care Lab II. 2 Credits.

Offered spring. Offered at Missoula College. 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.

AHRC 252 - Respiratory Care Review. 2 Credits.

Offered autumn. Offered at Missoula College. 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.

AHRC 255 - Clinical Experience I. 4 Credits.

Offered spring. Offered at Missoula College. 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.

AHRC 260 - Resp Care Lab III. 1 Credit.

Offered summer. Offered at Missoula College. 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.

AHRC 265 - Clinical Experience II. 5 Credits.

Offered summer. Offered at Missoula College. 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.

AHRC 270 - Resp Care Lab IV. 1 Credit.

Offered autumn. Offered at Missoula College. Emphasis on neonatal and pediatric critical care. Clinical competencies introduced in RES 241 are studied. Peer and instructor review of competencies are included.

AHRC 275 - Clinical Exp III. 6 Credits.

Offered autumn. Offered at Missoula College. Continuation of RES 265 with critical care of the adult. Neonatal and pediatric critical care experiences are emphasized. Students also participate in physician rounds.

AHRC 291 - Special Topics. 1-8 Credits.

(R-6) Offered intermittently. Offered at Missoula College. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

AHRC 292 - Independent Study. 1-6 Credits.

Offered at Missoula College. Course material appropriate to the needs and objectives of the individual student.

Allied Health: Health Sciences (AHHS)

AHHS 191 - Special Topics. 1-6 Credits.

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

AHHS 291 - Special Topics. 1-6 Credits.

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

AHHS 300 - PreMedical Sciences 101 Honors: The Science of Health Professions Success. 2 Credits.

This course is designed to aid in student retention in the Health Professions preparation paradigm. By the end of the course students should be able to chose an appropriate major for their chosen post-graduation school, be aware of every member of today's health care team and know their roles and be aware of the steps necessary to prepare for entry into a health professions school such as medical school, dental school, PA, veterinary (interview prep, acquiring letters of recommendation, entrance exam prep, personal statement writing, financing, etc.). They will also be exposed to end-of-life ethics, foreign medical service, and types of volunteering, job shadowing necessary for a future in the health professions. The enrollment max is 30 students. This course will be offered Fall and Spring semesters. It is typically taught at the Mountain campus in Skaggs 169 or Skaggs 117 in a face-to-face manner. The grade policy is standard letter grades.

AHHS 325 - Introduction to Gerontology. 3 Credits.

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. 1 Credit.

(R-3) Offered spring. Attendance and participation in the Montana Gerontology Society meeting held annually in April.

AHHS 389 - Rec Adv in Clin Med. 1 Credit.

(R-3) 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 specialities.

AHHS 390 - Research. 1-4 Credits.

(R-8) Offered autumn and spring. Prereq., consent of instr. Traditional or CR/NCR grading determined by instructor.

AHHS 391 - Special topics. 1-12 Credits.

(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. 2 Credits.

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. 1-3 Credits.

(R-3) Offered spring. Prereq., HS 325. Service learning experience in geriatrics in a setting compatible with the student's major and interests.

AHHS 418 - Geriatric Health Care. 1 Credit.

(R-4) Offered spring semester. Course is offered on the Mountain Campus using blended delivery. Geriatric topics presented as a webinar by the University of Washington health professions faculty via the UW Interactive Virtual Classroom. Course is graded on attendance. Faculty are available for questions at end of presentation.

AHHS 420 - Geriatric Health Issues. 3 Credits.

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. 3 Credits.

Offered spring. 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 450 - Interprofessional Collaborative Practice Skills. 1 Credit.

Offered autumn, Mountain campus, face-to-face. The primary goals of this seminar course are to bring students from various health care programs into one classroom to learn about interprofessional collaborative practice concepts and further develop skills needed to work as interdisciplinary teams in various health care settings. Students will be engaged through small and large group discussions/activities, relevant reading assignments, and short topic presentations to develop core competencies for IP practice. Available CR/NCR only. Level: Undergraduate and Graduate

AHHS 470 - Friday Morning Medical Confere. 1 Credit.

(R-9) Offered autumn and spring. Face-to-face course, webinar presentation with in-class discussion. This course is a weekly presentation provided locally at Providence Saint Patrick Hospital and streamed live to the Skaggs building 174. A variety of relevant health care topics are presented by local, regional and national speakers. FMMC is sponsored and supported by Western Montana AHEC. Students attending will learn about a variety of concepts, medical approaches, and health-care related issues impacting health care practitioners in a variety of settings. A facilitated in-class activity or discussion will wrap up the session each week. The material presented each semester is different, so students can take the course more than once. Offered fall and spring semesters. CR/NCR grading only.

AHHS 490 - Research. 1-4 Credits.

(R-8) Offered autumn and spring. Prereq., consent of instr. Traditional or CR/NCR grading determined by instructor.

AHHS 491 - Special Topics. 1-12 Credits.

(R-12) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

AHHS 550 - Interprofessional Collaborative Practice Skills. 1 Credit.

Offered autumn, Mountain campus, face-to-face. The primary goals of this seminar course are to bring students from various health care programs into one classroom to learn about interprofessional collaborative practice concepts and further develop skills needed to work as interdisciplinary teams in various health care settings. Students will be engaged through small and large group discussions/activities, relevant reading assignments, and short topic presentations to develop core competencies for IP practice.Students enrolled for graduate credit will complete a paper on an IP topic. Traditional letter grade only. Level: Graduate

AHHS 582 - Implementing Value Based System Change in Rehabilitation. 1 Credit.

Offered every semester. 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. 2 Credits.

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 591 - Special Topics. 1-12 Credits.

(R-12) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. Level: Gradaute

AHHS 599 - System Skills to Thrive in a Changing Health Care Environment - Capstone Project. 4 Credits.

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

Allied Hlth: Athletic Training (AHAT)

AHAT 210 - Prevention and Care Athletic Injuries. 2 Credits.

Offered autumn and Spring. Coreq., AHAT 213. Development of knowledge of prevention, assessment, treatment, rehabilitation, emergency care of athletic injuries.

AHAT 213 - Prevention and Care Athletic Injuries Lab. 1 Credit.

Coreq., AHAT 210. Development of practical skills in prevention, assessment, treatment, rehabilitation, and emergency care of athletic injuries.

AHAT 292 - Independent Study. 1-6 Credits.

(R-6) Offered every term. Prereq., consent of advisor and instr. Course material appropriate to the needs and objectives of the individual student.

AHAT 324 - Assessment of the Extremities. 2 Credits.

Coreq., AHAT 325. The study and practice of techniques used when assessing athletic injuries to the upper and lower extremities, including the spine.

AHAT 325 - Assessment of the Extremities Lab. 1 Credit.

Coreq., AHAT 324. The study and practice of techniques used when assessing athletic injuries to upper and lower extremities including the spine.

AHAT 342 - Therapeutic Interventions. 2 Credits.

Offered spring. Prereq., WRIT 101 or equivalent, and one intermediate writing course, coreq., AHAT 343. Theories and application methods of interventions such as therapeutic modalities and exercise for athletic injuries. Substantial reading and writing component.

Gen Ed Attributes: Writing Course-Advanced

AHAT 343 - Therapeutic Interventions Lab. 1 Credit.

Offered spring. Coreq., AHAT 342. Laboratory sessions examining theories and application methods of interventions such as therapeutic modalities and exercise for athletic injuries.

Gen Ed Attributes: Writing Course-Advanced

AHAT 479 - Topics in Sports Medicine. 3 Credits.

Offered spring. Prereq., Junior standing or higher. The etiology and management of sports related injuries/illnesses. Includes: therapeutic use of drugs, pre-participation screening techniques, ergogenic aids, the aging athlete, the sports medicine team concept and current medical treatment of sports injuries.

AHAT 490 - Undergraduate Research. 1-3 Credits.

(R-6) Offered every term. Prereq., consent of instr. Directed individual research and study appropriate to the back ground and objectives of the student.

AHAT 492 - Independent Study. 1-3 Credits.

(R-6) Offered every term. Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student.

AHAT 498 - Internship. 2-6 Credits.

(R-6) Offered every term. Prereq. all HHP options minimum junior standing and ECP 120/121 (or equivalent). Prereqs per option. Exercise Science Applied: KIN 320/321. If internship is coaching or strength & conditioning must also have completed KIN 410 and COA 405. Exercise Science Pre-Professional: KIN 320/321. If internship is cardiac rehab must also have completed KIN 460/483/484. Community Health: CHTH 335. Supervised field experiences with private businesses, public agencies, or institutions. 45 hours of internship site work = 1 credit. A maximum of 6 credits of Internship 498 may count toward graduation. Students should not be registered for more than 14 credits their internship semester.

Anthropology (ANTY)

ANTY 101H - Anthro & the Human Experience. 3 Credits.

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.

Gen Ed Attributes: Historical Studies, Cultural Intl Diversity (X)

ANTY 102H - Intro to South & S. East Asia. 3 Credits.

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. Countries include India, Indonesia, Vietnam, Thailand, Sri Lanka, Pakistan and Nepal. An overview approach with different materials and emphases.

Gen Ed Attributes: Historical Studies, Cultural Intl Diversity (X)

ANTY 103H - Intro Latin American Studies. 3 Credits.

Offered intermittently. Multidisciplinary survey and introduction to Latin America from pre- Columbian times to the present.

Gen Ed Attributes: Historical Studies, Cultural Intl Diversity (X)

ANTY 104 - Ancient Migrations. 3 Credits.

Offered spring. An exploration of migrations in human prehistory and history as known from DNA studies, the archaeological record, historical linguistics, the human fossil record and history. How these migrations have impacted the culture, institutions, and biology of contemporary societies and populations.

ANTY 122S - Race and Minorities. 3 Credits.

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.

Gen Ed Attributes: Social Sciences Course (S), Democracy and Citizenship (Y)

ANTY 126 - Anthropology and Global Health. 3 Credits.

Offered intermittently, Mountain Campus, Face to face. This course will examine a set of global health problems rooted in rapidly changing social structures, cultural beliefs and practices, and environmental and biological realities that transcend geopolitical and other imagined boundaries. Students will explore case studies (addressing Ebola, tuberculosis, mental illness, and other topics) and a multidisciplinary literature (including anthropology, epidemiology, history, and biomedicine) centering on how biosocial perspectives might provide a foundation to improve health and well-being on a global level.

ANTY 133X - Food and Culture. 3 Credits.

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.

Gen Ed Attributes: Cultural Intl Diversity (X)

ANTY 141H - The Silk Road. 3 Credits.

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.

Gen Ed Attributes: Historical Studies, Cultural Intl Diversity (X)

ANTY 150X - Archaeology of Yellowstone: 11,000 Years of Native Americans in Yellowstone National Park. 3 Credits.

Offered autumn. Introduces students to the Native American prehistory and history of Yellowstone National Park, from 11,000 years ago to the present. The focus is on archaeological sites in the various areas of the park, including lakes, mountains, obsidian sources, rivers, and geyser basins.

Gen Ed Attributes: Cultural Intl Diversity (X)

ANTY 191 - Special Topics. 1-6 Credits.

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

ANTY 191E - Special Topics. 1-6 Credits.

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

Gen Ed Attributes: Ethical & Human Values Course

ANTY 192 - Independent Study. 1-6 Credits.

ANTY 193 - Study Abroad. 1-12 Credits.

ANTY 198 - Internship. 1-6 Credits.

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, and 498) may count toward graduation.

ANTY 210N - Intro to Physical Anthropology. 3 Credits.

Offered autumn and spring. An introduction to human evolutionary biology including processes of evolution, primate studies, hominid paleontology, and human variation.

Gen Ed Attributes: Natural Science Course (N)

ANTY 213N - Physical Anthropology Lab. 1 Credit.

Prereq., or coreq., ANTY 210N. Offered autumn and spring. 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. Gen Ed Attributes: Natural Science Lab Course (N)

Gen Ed Attributes: Natural Science Course (N)

ANTY 220S - Culture & Society. 3 Credits.

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.

Gen Ed Attributes: Social Sciences Course (S), Cultural Intl Diversity (X)

ANTY 241H - Central Asian Culture and Civ. 3 Credits.

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.

Gen Ed Attributes: Historical Studies, Cultural Intl Diversity (X)

ANTY 250S - Intro to Archaeology. 3 Credits.

Offered autumn and spring. What archaeologists do and how they reconstruct past human cultures. Methodological and theoretical approaches to understanding and explaining past human societies.

Gen Ed Attributes: Social Sciences Course (S)

ANTY 251H - Foundations of Civilization. 3 Credits.

Offered intermittently. 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.

Gen Ed Attributes: Historical Studies, Cultural Intl Diversity (X)

ANTY 254H - Arch Wonders of the World. 3 Credits.

Offered spring even numbered years. Prereq., WRIT 101 (or higher) or equivalent. 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.

Gen Ed Attributes: Historical Studies, Writing Course-Intermediate, Cultural Intl Diversity (X)

ANTY 291 - Special Topics. 1-6 Credits.

(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. 3 Credits.

Offered autumn. Prereq., ANTY 210N, WRIT 101 (or higher) or equivalent 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.

Gen Ed Attributes: Writing Course-Intermediate

ANTY 312 - Human Evolution. 3 Credits.

Offered autumn, odd-numbered years. 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. 3 Credits.

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.

ANTY 318 - Casting & Facial Approximation. 3 Credits.

Offered intermittently. 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. 3 Credits.

Offered spring. The history and culture of the Indian tribes in Montana.

Gen Ed Attributes: Cultural Intl Diversity (X)

ANTY 326E - Indigenous Peoples & the Ethics of Development. 3 Credits.

Offered spring odd-numbered years. This class will examine the impact of global development on tribal and Indigenous peoples. Discussion topics will include ethical issues, land, health, employment, and cultural change caused by global development as well as explore how and why Indigenous societies resist or adapt to imposed changes.

Gen Ed Attributes: Ethical & Human Values Course, Cultural Intl Diversity (X)

ANTY 330X - Peoples and Cultures of World. 3 Credits.

(R-9) Offered autumn and spring. Study of the peoples of various geographic regions and their cultures.

Gen Ed Attributes: Cultural Intl Diversity (X)

ANTY 333 - Culture and Population. 3 Credits.

Offered intermittently. 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. 3 Credits.

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.

ANTY 347 - Central Asia and Its Neighbors. 3 Credits.

Offered intermittently. 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. 3 Credits.

Offered intermittently. Study of the processes of social change, modernization and development.

ANTY 351H - Archaeology of North America. 3 Credits.

Offered autumn. The origins, backgrounds and development of Pre-Columbian American peoples and cultures.

Gen Ed Attributes: Historical Studies, Cultural Intl Diversity (X)

ANTY 352X - Archaeology of Montana. 3 Credits.

Offered spring. The origins, distributions and development of aboriginal cultures in Montana and surrounding regions.

Gen Ed Attributes: Cultural Intl Diversity (X)

ANTY 353 - PaleoIndian Archaeology. 3 Credits.

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. 3 Credits.

Offered spring odd-numbered years. The development of civilization and prehistoric states in the New World. Prehistoric lifeways and the effects of European contact on these cultures.

Gen Ed Attributes: Historical Studies

ANTY 391 - Special Topics. 1-9 Credits.

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

ANTY 398 - Internship. 1-6 Credits.

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.

ANTY 400 - History of Anthropology. 3 Credits.

Offered intermittently. Prereq., majors and minors in Anthropology. 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.

ANTY 401 - Anthropological Data Analysis. 3 Credits.

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. 3 Credits.

Offered autumn even numbered years. Prereq., WRIT 101 or equivalent, and one intermediate writing course. 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.

Gen Ed Attributes: Writing Course-Advanced

ANTY 403 - Public Anthropology. 3 Credits.

Offered spring odd-numbered years. Prereq., ANTY 101H or 220S, or consent of instr. Focus on the public accountability, transparency and the value and effects of anthropological research for local, national, and transnational communities. Level: Undergraduate

ANTY 404 - Anthropological Museology. 3 Credits.

Offered spring even-numbered years. Prereq., ANTY 101H. Introduction to anthropological museums, museum work and museum theory.

ANTY 408 - Advanced Anthro Statistics. 3 Credits.

Offered intermittently. Prereq., WRIT 101 or equivalent, and one intermediate writing course, and ANTY 401 or consent of inst. Focus on techniques used for microcomputer-based data management and multivariate analysis.

Gen Ed Attributes: Writing Course-Advanced

ANTY 409 - Preceptorship in Anthropology. 1-3 Credits.

(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. 4 Credits.

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. 3 Credits.

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. 3 Credits.

Offered spring, odd-numbered years. 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. 3 Credits.

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 418 - Evolution and Genetic Variation in Human Populations. 3 Credits.

Offered spring, even-numbered years. Prereq. ANTY 310. Human genetic variation examined from a molecular perspective. Emphasis on the role of infectious disease and other factors 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. 3 Credits.

Offered intermittently. The study of socialization, personality, cognition, and mental health cross-culturally.

ANTY 423 - Culture and Identity. 3 Credits.

Offered intermittently. 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. 3 Credits.

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. 3 Credits.

Offered spring, odd-numbered years. Comparative study of the history and significance of gender in social life.

ANTY 430 - Social Anthropology. 3 Credits.

Offered intermittently. Prereq., WRIT 101 or equivalent, and one intermediate writing course. Seminar style senior capstone course for cultural anthropology students. This course focuses on bringing theory and methods together in written and visual ethnography.

Gen Ed Attributes: Writing Course-Advanced

ANTY 431 - Ethnographic Field Methods. 3 Credits.

Offered intermittently. Prereq., WRIT 101 or equivalent, and one intermediate writing course and ANTY 220S or consent of instr. Introduction to socio-cultural anthropological methods including participant observation, interviewing and narrative techniques and analysis of qualitative data.

Gen Ed Attributes: Writing Course-Advanced

ANTY 433 - Indig Global Health & Healing. 3 Credits.

Offered intermittently. 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. 3 Credits.

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. 3 Credits.

Offered intermittently. Prereq., ANTY 102H. An examination of the major issues that affect the contemporary experience of South and Southeast Asians.

ANTY 442 - Cities/Landscapes Central Asia. 3 Credits.

Offered intermittently. 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. 3 Credits.

Offered intermittently. 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. 3 Credits.

Offered autumn odd-numbered years. Prereq., WRIT 101 or equivalent, and one intermediate writing course and ANTY 250S. Historical trends and current major theories and methods in archaeology. Co-convenes with ANTY 550.

Gen Ed Attributes: Writing Course-Advanced

ANTY 451 - Cultural Resource Management. 3 Credits.

Offered autumn, even-numbered years. 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.

ANTY 452 - GIS in Archaeology. 3 Credits.

Offered intermittently. Prereq., ANTY 250s. Anthropological and archaeological data acquisition, management, and analysis using Geographic Information Systems (GIS) tools and techniques.

ANTY 454 - Lithic Technology. 3 Credits.

Offered autumn odd-numbered years. Prereq., ANTY 250S and consent of instr. Analysis of stone artifacts and debitage.

ANTY 455 - Artifact Analysis. 3 Credits.

Offered spring. Prereq., WRIT 101 or equivalent, and one intermediate writing course and ANTY 250S or consent of instr. Laboratory approaches and techniques for analyzing material culture from technological, stylistic, and chronological perspectives.

Gen Ed Attributes: Writing Course-Advanced

ANTY 456 - Historical Archaeology. 3 Credits.

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 458 - Arch of Hunter-Gatherers. 3 Credits.

Offered autumn even-numbered years. Introduction to the archaeological study of hunter-gatherer societies. Primary emphasis on archaeological method and theory.

ANTY 459 - Archof the Arctic/Subarctic. 3 Credits.

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. 3 Credits.

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. 1-12 Credits.

(R-12) Prereq., ANTY 250S. Offered autumn. A field course in Montana archaeology.

ANTY 467 - Archaeological Field School. 3-12 Credits.

(R-12) Offered summer and/or winter. 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. 3 Credits.

(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. 1-9 Credits.

(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. 1-6 Credits.

(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. 3 Credits.

Offered spring even-numbered years. 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:. 1-12 Credits.

(R-12) Offered intermittently. Prereq., consent of instr. Organized field experience in anthropology.

ANTY 500 - Cont Anthro Thought. 3 Credits.

Offered intermittently. 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. 3 Credits.

Offered intermittently. The location, use, and value of written records in anthropological research. Level: Graduate

ANTY 510 - Sem Human Var & Evol. 3 Credits.

(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. 3 Credits.

(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. 3 Credits.

(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. 3 Credits.

(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. 3 Credits.

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 Contemporary Ethnography. 3 Credits.

Offered intermittently. A review and discussion of current ethnographic research. Level: Graduate

ANTY 521 - Applied Anthropology. 3 Credits.

Offered intermittently. Study of ways in which anthropological skills may be used in non-academic fields. Level: Graduate

ANTY 522 - Medical Anthropology. 3 Credits.

Offered intermittently. 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. 3 Credits.

Offered autumn odd-numbered years. A review and discussion of current research.Topics vary. Co-convenes with ANTY 450. Level: Graduate

ANTY 551 - Seminar Historical Archaeology. 3 Credits.

Offered autumn odd-numbered years. An exploration of theories, methods, and literature in historical archaeology. Level: Graduate

ANTY 553 - Evolutionary Archaeology. 3 Credits.

Offered autumn even-numbered years. 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. 1-10 Credits.

(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

ANTY 595 - Special Topics. 1-9 Credits.

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

ANTY 596 - Independent Study. 1-9 Credits.

(R-9) Offered every term. Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student. Level: Graduate

ANTY 597 - Research. 1-10 Credits.

(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. 1-6 Credits.

(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

ANTY 599 - Thesis. 1-10 Credits.

(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. 3 Credits.

Offered autumn. Prereq., consent of instr. Doctoral dissertation research activties.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. 3 Credits.

Offered spring. Prereq., graduate standing. Seminar in the development of anthropological research designs and proposals. Level: Graduate

ANTY 602 - Cultl Herit Policy & Pract. 3 Credits.

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. 1-6 Credits.

(R-6) Offered intermittently. A review and discussion of current research. Topics vary. Level: Graduate

ANTY 697 - Advanced Research. 1-6 Credits.

(R-6) Offered every term. Prereq., consent of instr. Independent research projects, other than dissertation. Level: Graduate

ANTY 699 - Dissertation. 1-10 Credits.

(R-10) Offered every term. Doctoral dissertation research activities. Level: Graduate

Applied Arts and Sciences (AASC) < University of Montana

Applied Arts and Sciences (AASC)

AASC 100 - Intro to University Experience. 3 Credits.

Offered at Missoula College. 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. 2 Credits.

Offered at Missoula College. 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.

AASC 291 - Special Topics. 1-6 Credits.

(R-6) Offered intermittently. Offered at Missoula College. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

AASC 294 - Seminar. 2 Credits.

Offered every semester at Missoula College, open to Missoula College or Mountain Campus students who have completed at least 1 semester in the course for which they will tutor. Prereq., consent of instructor. Meets in class 1 hour each week (online course supplement), with three hours of tutoring per week in supervised setting required after week 3. Not repeatable.

Arabic (ARAB) < University of Montana

Arabic (ARAB)

ARAB 101 - Elementary Modern Standard Arabic I. 4 Credits.

Offered autumn. Elementary Modern Standard Arabic I brings students the opportunity to learn Arabic via a communicative approach, where the emphasis is placed on the functional use of the Arabic Language. Active skills are listening, speaking, reading, and writing, plus basic cultural study.

ARAB 102 - Elementary Modern Standard Arabic II. 4 Credits.

Offered spring. Elementary Modern Standard Arabic II is a continuation of ARAB 101, in that it helps students learn Arabic via a communicative approach, where the emphasis is placed on the functional use of the Arabic Language. Active skills are listening, speaking, reading, and writing, plus basic cultural study.

Gen Ed Attributes: Foreign Language Requirement

ARAB 191 - Special Topics. 1-6 Credits.

(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 Standard Arabic I. 4 Credits.

Offered autumn. Prereq., ARAB 102 or equiv. Course is designed to help students further develop their language skills (listening, speaking, reading, and writing) and learn more about the Arab culture and advanced grammar rules beyond the elementary level. The target proficiency level is Intermediate-Low/Mid (based on proficiency guidelines from the American Council on the Teaching of Foreign Languages).

Gen Ed Attributes: Foreign Language Requirement

ARAB 202 - Intermediate Modern Standard Arabic II. 4 Credits.

Offered spring. Prereq., ARAB 201 or equiv. Course is a continuation of ARAB 201, in that it is designed to help students further develop their language skills (listening, speaking, reading, and writing) and learn more about the Arab culture and advanced grammar rules beyond the elementary level. The target proficiency level is Intermediate-Mid (based on proficiency guidelines from the American Council on the Teaching of Foreign Languages).

Gen Ed Attributes: Foreign Language Requirement

ARAB 291 - Special Topics. 1-8 Credits.

(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. 1-6 Credits.

(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. 3 Credits.

Offered autumn. Prereq., ARAB 202 or equiv. Course is designed to help students further develop their language skills (listening, speaking, reading, and writing) and learn more about the Arab culture and advanced grammar rules beyond the intermediate level. The target proficiency level is Intermediate-High (based on proficiency guidelines from the American Council on the Teaching of Foreign Languages)

Gen Ed Attributes: Foreign Language Requirement

ARAB 302 - Adv Modern Standard Arabic II. 3 Credits.

Offered spring. Prereq., ARAB 301 or equiv. Course is a continuation of ARAB 301, in that it is designed to help students further develop their language skills (listening, speaking, reading, and writing) and learn more about the Arab culture and advanced grammar rules beyond the intermediate level. The target proficiency level is Intermediate-High/Advanced-Low (based on proficiency guidelines from the American Council on the Teaching of Foreign Languages).

Gen Ed Attributes: Foreign Language Requirement

ARAB 305 - The Arab World. 3 Credits.

Offered autumn. 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. This course is designed for everyone interested in the topic, and no previous knowledge of the Arabic language is required.

ARAB 307 - Model Arab League Delegates. 3 Credits.

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. Students will learn parliamentary procedures used in institutions such as the Arab League itself; this mode of discourse will provide the basis for which students debate topics in class in order to better understand the region.

ARAB 317 - Model Arab League Staff. 3 Credits.

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. 1-9 Credits.

(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. 1-6 Credits.

(R-6) Offered autumn and spring. Course material appropriate to the needs and objectives of the individual student.

Art (ARTZ)

ARTZ 103A - Art for Non-Majors. 3 Credits.

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.

Gen Ed Attributes: Expressive Arts Course (A)

ARTZ 105A - Visual Language - Drawing. 3 Credits.

Offered autumn and spring. Introduction to basic drawing skills and concept integration. Studio practice with research in historical and contemporary approaches.

Gen Ed Attributes: Expressive Arts Course (A)

ARTZ 106A - Visual Language - 2-D Fndtns. 3 Credits.

Offered autumn and spring. Introduction to the formal elements and principles of design, color theory, and predominant western and non-western historical styles.

Gen Ed Attributes: Expressive Arts Course (A)

ARTZ 108A - Visual Language - 3-D Fndtns. 3 Credits.

Offered autumn and spring. Introduction to the formal elements and principles of design in 3-D.

Gen Ed Attributes: Expressive Arts Course (A)

ARTZ 131A - Ceramics for Non-majors. 3 Credits.

Offered Offered autumn and spring. A general introduction to ceramics for non-art majors. Learn a variety of techniques working with clay and glazes. No Art experience required. Not for B.A, B.F.A majors or art minors.

Gen Ed Attributes: Expressive Arts Course (A)

ARTZ 191 - Special Topics. 1-6 Credits.

(R-12) Offered intermittently. Experimental offerings by visiting professors, experimental offerings of new courses, and/or one-time offerings of current topics.

ARTZ 211A - Drawing I. 3 Credits.

Offered intermittently. Prereq., ARTZ 105A. Study of human anatomy through drawing, in-class skills development, homework portfolio, and research in historical and contemporary figuration required.

Gen Ed Attributes: Expressive Arts Course (A)

ARTZ 214 - Illustration. 3 Credits.

Offered autumn. This course is an introduction to drawing techniques as they pertain to the commercial illustration industry; emphasis on creative interpretation and disciplined draftsmanship for the visual communication of ideas.

ARTZ 221A - Painting I. 3 Credits.

Offered autumn and spring. Introduction to acrylic and oil painting. Emphasis on color theory, composition, concept development, and research in historical and contemporary strategies.

Gen Ed Attributes: Expressive Arts Course (A)

ARTZ 231A - Ceramics I. 3 Credits.

Offered autumn and spring. Introduction to ceramic techniques. Introduction to clay as a historical and contemporary medium to explore art making. Emphasis on handbuilding and wheel throwing, and concept development including large scale sculpture and functional pottery.

Gen Ed Attributes: Expressive Arts Course (A)

ARTZ 251A - Sculpture I. 3 Credits.

Offered autumn and spring. Offered autumn and spring. Introduction to fundamental technical skills and processes used to make sculptural objects. Emphasis on formal concerns, concept development, and new technologies in art.

Gen Ed Attributes: Expressive Arts Course (A)

ARTZ 271A - Printmaking I. 3 Credits.

(R-9) Offered autumn and spring. Emphasis on multiples, layering color, and collaboration. Topics may include: relief, intaglio, lithography, screenprinting, artist books, mixed media, or photo-processes. Consideration of historical and contemporary approaches.

Gen Ed Attributes: Expressive Arts Course (A)

ARTZ 284A - Photo I-Techs and Processes. 3 Credits.

Offered autumn and spring. Introduction to photography. Emphasis on exposure, digital camera basics, composition, digital photography processing, and print finishing techniques. Consideration of historical and contemporary approaches.

Gen Ed Attributes: Expressive Arts Course (A)

ARTZ 291 - Special Topics. 1-9 Credits.

(R-12) Offered intermittently. Experimental offerings by visiting professors, experimental offerings of new courses, and/or one-time offerings of current topics.

ARTZ 302A - Elementary School Art. 2 Credits.

Offered autumn and spring. Prereq., restricted to majors in elementary education, early childhood education, and art with registration in one section restricted to those formally admitted into the Teacher Education Program. Visual art teaching methods for future elementary school teachers in a variety of media, methods of critique, and curricular components.

Gen Ed Attributes: Expressive Arts Course (A)

ARTZ 311 - Drawing II. 3 Credits.

(R-12) Offered intermittently. Prereq., ARTZ 211A and ARTH 250L. Focus on integrating content and form in drawings and research in historical and contemporary ideas.

ARTZ 321 - Painting II. 3 Credits.

(R-12) Offered autumn and spring. Continued development of painting skills and concepts with an emphasis on contemporary ideas and approaches. Topics may include: figuration, place, process, abstraction, and other contemporary themes.

ARTZ 331 - Ceramics II. 3 Credits.

(R-12) Offered autumn and spring. More advanced development of ceramic process with emphasis on idea development and individual skill building. Depending on the section handbuilding, wheel throwing and other technique will be taught. Focus on integrating content and form through study of historical and contemporary approaches.

ARTZ 335 - Clay and Glaze. 3 Credits.

Offered autumn. In-depth study of the physical and chemical properties of clays and glazes. Hands-on testing of clay and glaze formulas and introduction to kiln firing.

ARTZ 351 - Sculpture II. 3 Credits.

(R-12) Offered autumn and spring. Continued development of sculptural processes. Emphasis on clear sculptural responses to material-based and topic-based assignments. Consideration of both analog and digital means.

ARTZ 370 - Contemporary Printmaking Studio. 3 Credits.

Offered intermittently. Contemporary Printmaking Studio. Intermediate print course requiring students to establish their own studio set-up for printmaking media. Emphasis on creating multiples, layering color, and breadth of processes. Topics may include: relief, screenprinting, book arts, and outsourced digital fabrication methods.

ARTZ 371 - Printmaking II. 3 Credits.

(R-12) Offered autumn and spring. Continued development of printmaking processes. Emphasis on integration of content. Focus on layering of color, increased scale, styles of format and presentation, and research in historical and contemporary approach topics may include: relief, screenprinting, monotypes, book arts, and outsourced digital fabrication methods.

ARTZ 380 - Data Arts. 3 Credits.

Offered autumn or spring. Data Arts teaches the essential and practical skills necessary to communicate information about data clearly and effectively through graphic and visual design.

ARTZ 384 - Photo II-Theory, Crit, Prctice. 3 Credits.

(R-12) Offered autumn and spring. Prereqs., ARTH 250L and prereq. or coreq. ARTZ 284A. Further exploration of photography. Emphasis on traditional film and darkroom-based processes, expansion of technical knowledge in small and medium format cameras, film and chemical process, presentation options, and research in historical and contemporary approaches.

ARTZ 385 - The Art of Digital Photography. 3 Credits.

(R-12) Offered autumn or spring. Prereq. or coreq., ARTH 250L and ARTZ 284A. Further exploration of photography. Emphasis on effective use of color, advanced editing techniques, studio and strobe lighting, varied approaches to format and presentation, introduction to video capture and editing, and research in historical and contemporary approaches.

ARTZ 388 - Alternative Process Photog. 3 Credits.

Offered intermittently. Prereq. or coreq., ARTH 250L and ARTZ 284A. Exploration of historic and alternative photography techniques such as cyanotype, pinhole, and wet-plate. Focus on digital negative, historic optics, and varied approaches to format, presentation, and research in historical and contemporary approaches.

ARTZ 389 - Synthesis. 3 Credits.

Offered spring. Prereq., or correq., ARTZ 341, ARTZ 370, and ARTZ 380. The course allows students to draw together their learning and their critical thinking into a defining experience, through the development of a synthesis project and a written presentation.

ARTZ 391 - Special Topics. 1-9 Credits.

(R-12) Offered intermittently. Prereq., ARTH 250L. Experimental offerings by visiting professors, experimental offerings of new courses, and/or one-time offerings of current topics.

ARTZ 394 - Seminar- Environmental Drawing. 3 Credits.

(R-6) Offered intermittently. Prereq., consent of instr. Some restrictions might be applied to specific sections of this course.

ARTZ 398 - Internship. 1-12 Credits.

(R-12) Offered autumn and spring. Prereqs., ARTH 250L and/or consent of instructor. Special internships under instructor supervision offering practical experience.

ARTZ 402 - Teaching Art I-- K-12. 3 Credits.

Offered autumn. Prereqs., ARTH 250L and junior standing. Preparation for art specialists including historical and contemporary trends in curriculum development, teaching procedures, child growth and development in art, resources, evaluation, democratic teaching practices, and directed teaching experiences in school setting.

ARTZ 403 - Teaching Art II-- K-12. 3 Credits.

Offered spring. Prereq., ARTZ 402. Continuation and practical application of ARTZ 402.

ARTZ 410 - Advanced Research- Drawing. 3 Credits.

(R-9) Offered intermittently. Advanced Research Drawing, Further exploration of time-based studio practice including assignments and student proposals.

ARTZ 420 - Advanced Research- Painting. 3 Credits.

(R-9) Offered intermittently. Prereq., ARTZ 351 or consent of instructor. Further exploration and establishment of a functional studio art practice including technical skills, concept development, and understanding of contemporary themes and theory.

ARTZ 430 - Advanced Research- Ceramics. 3 Credits.

(R-9) Offered intermittently. Prereq., ARTZ 231A. An advanced critique-based studio class where students design their own project proposals and work one-on-one with the faculty.

ARTZ 451 - Advanced Research- Sculpture. 3 Credits.

(R-9) Offered intermittently. Prereq., ARTZ 351 or consent of instructor. Further exploration of sculpture-related studio practice including technical and student proposals.

ARTZ 470 - Advanced Research- Printmaking. 3 Credits.

(R-9) Offered intermittently. Prereqs., ARTH 250L and ARTZ 271A or consent of instructor. Further exploration of printmaking techniques including student proposals.

ARTZ 486 - Advanced Research- Photography. 3 Credits.

(R-9) Offered intermittently. Prereqs., ARTZ 384 or 385 or 388 or consent of instructor. Further exploration of photography-related studio practice including technical and conceptual student proposals.

ARTZ 490 - Senior Research. 1 Credit.

(R-2) Offered spring. Prereq., ARTZ 393. Self-directed research culminating in a short paper. This research provides narrative, perspective, and context for the studio project.

ARTZ 491 - Special Topics. 1-6 Credits.

(R-12) Offered intermittently. Prereq., ARTH 250L. Experimental offerings by visiting professors, new courses, and/or one-time offerings of current topics.

ARTZ 492 - Independent Study. 2-6 Credits.

(R-12) Offered intermittently. Prereqs., ARTH 250L or consent of instructor. Further exploration of studio practice including technical and conceptual student proposals.

ARTZ 494 - Seminar- Professional Practices. 3 Credits.

Offered autumn. Prereqs., senior status and prereq. or coreq., ARTH 250L. 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 application.

ARTZ 495 - Senior Studio Project. 3 Credits.

Offered spring. Capstone studio class of a self-determined ambitious thesis project. Specific projects formats are determined individually and include thematic integration. Examples of possible formats include a series of artworks, website videos, books, illustrations, collaborative multi-disciplinary events, multi-media presentations in other professions, data visualizations, etc

ARTZ 497 - Presentation to the Community. 1 Credit.

(R-2) Offered spring. This course examines the practical aspects of bringing a creative project forward to the public. Students will develop all aspects associated with staging a presentation of their final portfolio, including: writing proposals, press releases, CV and artist statements; developing budgets, seeking funding, installing artwork, and documenting presentation.

ARTZ 498 - Internship. 1-12 Credits.

(R-12) Offered intermittently. Prereqs., ARTH 250L and consent of instructor. Special internship under instructor supervision offering practical experience.

ARTZ 499 - Senior Thesis/Capstone. 3 Credits.

Offered spring. Prereqs., 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 required spring B.F.A. exhibition. Further exploration of professional practices topics and career opportunities.

ARTZ 501 - Graduate Critique Seminar. 2 Credits.

(R-16) Offered autumn and spring. Prereqs., graduate student status and consent of instructor. Weekly meetings to critique graduate student work. Level: Graduate

ARTZ 504 - Pre-Candidacy. 1 Credit.

(R-2) Offered autumn and spring. Prereqs., graduate student status and consent of instructor. Taken concurrently with 500-level Graduate Research/Studio Processes. Emphasis on one-on-one instruction with faculty in preparation for review prior to thesis work. Level: Graduate

ARTZ 505 - Grad Studio Res: Art. 1-3 Credits.

(R-24) Offered spring. Prereqs., graduate student status and consent of instructor. Regular meetings with faculty to discuss development of individual work. Level: Graduate

ARTZ 506 - Graduate Pedagogy. 3 Credits.

Offered autumn. Prereqs., first semester graduate student status and consent of instructor. Focus on current pedagogical practices in college-level art education. Emphasis on: syllabus, teaching philosophy, assignments preparation, public-speaking skills development, TA application and course shadowing. Level: Graduate

ARTZ 507 - Beyond Art School. 2 Credits.

Prereqs., graduate student status and consent of instructor. Introduction to professional practices and standards in the visual arts. Emphasis on: portfolio, resume, and web development, exhibition opportunities, grant writing, and artist residencies.

ARTZ 508 - Expanded Studio Practice. 3-6 Credits.

(R-6) Offered autumn and spring. Prereq., graduate student status and consent of instructor. Studio-based course with emphasis on collaborative practices across media. May include: topic-based studio assignments, thematic inquiry, responses to readings, and/or specific studio processes. Level: Graduate

ARTZ 511 - Grad Res/Studio Pr:Drawing. 2-6 Credits.

(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. 3-6 Credits.

(R-24) Offered autumn and spring. Prereq., consent of instructor. Advanced research in painting. Level: Graduate

ARTZ 531 - Grad Res/Studio Pr: Ceramics. 3-6 Credits.

(R-24) Offered autumn and spring. Prereq. consent of instructor. Advanced research in ceramics. Level: Graduate

ARTZ 551 - Grad Res/Studio Pr: Sculp. 2-6 Credits.

(R-24) Offered autumn and spring. Prereq., consent of instructor. Advanced research in sculpture. Level: Graduate

ARTZ 571 - Grad Res/Studio Pr: Print. 2-12 Credits.

(R-24) Offered autumn and spring. Prereq., consent of instr. Advanced research in printmaking. Level: Graduate

ARTZ 580 - Data Arts. 3 Credits.

Offered autumn and spring. Offered on the Mountain Campus, online delivery method. Data Arts teaches the essential and practical skills necessary to communicate information about data clearly and effectively through graphic and visual design. Level: Graduate

ARTZ 594 - Seminar. 1-6 Credits.

(R-6) Offered intermittently. Level: Graduate

ARTZ 595 - Special Topics. 1-9 Credits.

(R-12) Offered intermittently. Prereqs., graduate student status and consent of instructor. Experimental offerings by visiting professors, experimental offerings of new courses, and/or one-time offerings of current topics. Level: Graduate

ARTZ 596 - Independent Study. 2-6 Credits.

(R-18) Prereq., consent of instructor. Offered intermittently. Level: Graduate

ARTZ 597 - Research in Art History. 2-6 Credits.

(R-18) Offered intermittently. Prereq., consent of instr. Level: Graduate

ARTZ 598 - Internship. 2-6 Credits.

(R-6) Offered intermittently. Prereqs., graduate student status and Fine Arts Major and consent of instructor. Special internship under instructor supervision offering practical experience. Level: Graduate

ARTZ 697 - Thesis Paper. 1-3 Credits.

Offered intermittently. Prereqs., ARTZ 699 and consent of instructor. One-on-one instruction with thesis committee chair. Level: Graduate

ARTZ 699 - Thesis Exhibition. 1-12 Credits.

(R-12) Offered intermittently. Prereq., graduate student status and consent of instructor. Thesis exhibition preparation. Level: Graduate

Art History (ARTH)

ARTH 150H - Introduction to Art History. 3 Credits.

Surveys world art from prehistory through the present day with the objective of developing a critical understanding of art forms in their historical and cultural context.

Gen Ed Attributes: Historical Studies, Cultural Intl Diversity (X)

ARTH 160L - Global Visual Culture. 3 Credits.

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.

Gen Ed Attributes: Lit & Artistic Studies (L)

ARTH 161H - Topics in Art. 3 Credits.

Offered intermittently. An introduction to a specific topic or subject in the visual arts.

Gen Ed Attributes: Historical Studies

ARTH 191 - Special Topics. 1-6 Credits.

(R-12) Offered intermittently. Experimental offerings by visiting professors, new courses, and/or one-time investigations of current topics.

ARTH 200H - Art of World Civilization I. 3 Credits.

Offered autumn. Survey of the history of visual art from prehistory to 1400.

Gen Ed Attributes: Historical Studies, Cultural Intl Diversity (X)

ARTH 201H - Art of World Civilization II. 3 Credits.

Offered spring. Survey of the history of visual art from 1400 to the present.

Gen Ed Attributes: Historical Studies, Democracy and Citizenship (Y)

ARTH 202H - Alternative Approaches to Art History. 3 Credits.

Offered Autumn or Spring. Study of how the varied expressions of art across the world and across time are interconnected despite cultural shifts of their historic context.

Gen Ed Attributes: Historical Studies

ARTH 250L - Introduction to Art Criticism. 3 Credits.

Offered autumn. Prereqs., WRIT 101 (or higher) or equivalent, ARTH 150H or ARTH 200H. Study of the description, interpretation, and evaluation of visual art as practiced in art criticism.

Gen Ed Attributes: Lit & Artistic Studies (L), Writing Course-Intermediate

ARTH 291 - Special Topics. 1-6 Credits.

(R-12) Offered intermittently. Experimental offerings by visiting professors, new courses, and/or one-time investigations of current topics.

ARTH 333H - Architectural History I. 3 Credits.

Offered autumn. Prereqs., Pre-req., ARTH 150H or ARTH 201H or consent of instructor. Exploration of architectural styles, designs, and choices of the built environment from prehistory to the modern age.

Gen Ed Attributes: Historical Studies

ARTH 334H - Architectural History II. 3 Credits.

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.

Gen Ed Attributes: Historical Studies

ARTH 350 - Contemp Art and Art Criticism. 3 Credits.

Offered autumn and spring. Prereq., WRIT 101 or equivalent, and one intermediate writing course and ARTH 250L or consent of instructor. Exploration of artists, art works, critics, and theories from 1960 to the present.

Gen Ed Attributes: Writing Course-Advanced

ARTH 391 - Special Topics. 1-6 Credits.

(R-12) Offered intermittently. Experimental offerings by visiting professors, new courses, and/or one-time investigations of current topics.

ARTH 400 - Art & Architecture of Egypt. 3 Credits.

Offered intermittently. Prereqs., ARTH 150H or 201H and ARTH 250L or consent of instructor. Exploration of Egyptian art and architecture from prehistory to the present.

ARTH 407 - Roman and Early Christian Art. 3 Credits.

Offered intermittently. Prereqs., ARTH 150H or 201H, and ARTH 250L or consent of instructor. Exploration of Roman art and architecture from prehistory to the Early Christian period.

ARTH 410 - Medieval Art. 3 Credits.

Offered intermittently. Prereqs., ARTH 150H or 201H, and ARTH 250L or consent of instructor. Exploration of Medieval art and architecture from 250 to 1400.

ARTH 425 - Art of the Renaissance. 3 Credits.

Offered intermittently. Prereqs., ARTH 150H or 201H, and ARTH 250L or consent of instructor. Exploration of European art and architecture from 1450 to 1600.

ARTH 428 - Baroque Art. 3 Credits.

Offered intermittently. Prereqs., ARTH 150H or ARTH 201H and ARTH 250L or consent of instructor. Exploration of European art and architecture from 1600 to 1700.

ARTH 433H - Ancient American Art. 3 Credits.

Offered intermittently. Prereqs., ARTH 150H or ARTH 201H and ARTH 250L or consent of instructor. Exploration of ancient American art and architecture from prehistory to 1492.

Gen Ed Attributes: Historical Studies

ARTH 434 - Latin American Art. 3 Credits.

Offered intermittently. Prereq., ARTH 150H or ARTH 201H and ARTH 250L or consent of instructor. Exploration of Latin American art and architecture from 1492 to the present.

Gen Ed Attributes: Writing Course-Advanced

ARTH 436 - The History of Women in Art. 3 Credits.

Offered intermittently. Prereqs., ARTH 150H or ARTH 201H and ARTH 250L or consent of instructor. Exploration of women and art from prehistory to the present.

ARTH 440 - 20th Century Art. 3 Credits.

Offered intermittently. Prereqs., ARTH 150H or ARTH 201H and ARTH 250L or consent of instructor. Exploration of art and architecture of the 20th century.

ARTH 444 - Open Range: Land Art and the American Consciousness. 3 Credits.

Offered spring. Prereq., ARTH 200H and ARTH 250L or consent of instructor. The aim of this course is to investigate the sense of place in American visual arts of the 19th to 21st centuries. The course provides a roughly chronological view of the development of place in the American landscape, particularly in the west, and how that has been articulated by visual artists.

ARTH 445 - History of Photography. 3 Credits.

Offered intermittently. Prereqs., ARTH 150H or 201H and ARTH 250L or consent of instructor. Exploration of the history of photography from the early 19th century to the 21st century.

ARTH 458 - Adv Research in Art History. 2-6 Credits.

(R-9) Offered autumn and spring. Prereqs., a 300-level art history course and consent of instructor. Further exploration of art history topics including student proposals.

ARTH 459 - Advanced Research Art Crit. 3-6 Credits.

(R-9) Offered intermittently. Prereqs., ARTH 350 and consent of instructor. Further exploration of art criticism topics including student proposals.

ARTH 464 - African Art. 3 Credits.

Offered intermittently. Prereqs., ARTH 150H or ARTH 201H and ARTH 250L or consent of instructor. Exploration of African art and architecture from prehistory to the present.

ARTH 465 - Spanish Art. 3 Credits.

Offered intermittently. Prereqs., ARTH 150H or ARTH 201H and ARTH 250L or consent of instructor. Exploration of Spanish art and architecture from prehistory to the present.

ARTH 491 - Special Topics. 1-6 Credits.

(R-9) Offered intermittently. Prereq., ARTH 250L. Experimental offerings by visiting professors, new courses, and/or one-time investigation of current topics.

ARTH 492 - Independent Study. 1-6 Credits.

(R-6) Offered intermittently. Prereqs., a 300 or 400 level ARTH course, and consent of instructor. Further exploration of studio practice including technical and conceptual student proposals.

ARTH 494 - Sem Art Hist & Crit. 3 Credits.

(R-9) Offered intermittently. Prereq., a 300 or 400 level ARTH course, and consent of instructor. Upper-division seminar in varying topics of art history and criticism.

ARTH 498 - Internship. 1-6 Credits.

(R-12) Offered intermittently. Prereqs., ARTH 250L and/or consent of instructor. Special internship under instructor supervision offering practical experience.

ARTH 503 - Critical Theories in the Visual Arts I. 3 Credits.

Prereq., consent of instructor. Seminar on the history of art criticism. Level: Graduate

ARTH 509 - Critical Theories in Visual Arts II. 3 Credits.

Prereq., ARTH 503 or consent of instructor. Continuation of ARTH 503 with an emphasis on contemporary theories and topics. Level: Graduate

ARTH 550 - Graduate Studies/Art History. 2-6 Credits.

(R-24) Offered autumn and spring. Prereq., consent of instructor. Further research for graduate students in art history. Level: Graduate

ARTH 597 - Research in Art History. 3-9 Credits.

(R-24) Offered intermittently. Prereq., consent of instructor. Research for graduate students in art history and/or studio. Level: Graduate

ARTH 698 - Methodologies in Art History. 3-9 Credits.

(R-9) Offered intermittently. Prereq., consent of instr. Investigation of the historiography and practitioners of art history. Level: Graduate

ARTH 699 - Thesis. 1-6 Credits.

(R-6) Offered every term. Prereq., consent of instr. Preparation of a thesis or manuscript based on research for presentation and/or publication. Level: Graduate

Astronomy (ASTR)

ASTR 131N - Planetary Astronomy. 3 Credits.

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.

Gen Ed Attributes: Natural Science Course (N)

ASTR 132N - Stars, Galaxies, and the Universe. 3 Credits.

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.

Gen Ed Attributes: Natural Science Course (N)

ASTR 134N - Planetary Astronomy Lab. 1 Credit.

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. Gen Ed Attributes: Natural Science Lab Course (N)

Gen Ed Attributes: Natural Science Course (N)

ASTR 135N - Stars, Galaxies, and the Universe Lab. 1 Credit.

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. Gen Ed Attributes: Natural Science Lab Course (N)

Gen Ed Attributes: Natural Science Course (N)

ASTR 142N - The Evolving Universe. 4 Credits.

Offered spring. Prereq., working knowledge of precalculus (ie., college algebra and college trigonometry). Overview of recent developments in planetary system formation, stars, galaxies, and cosmology. Some astronomical observing required outside of normal class hours.

Gen Ed Attributes: Natural Science Course (N)

ASTR 191 - Special Topics. 1-6 Credits.

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

ASTR 198 - Internship. 1-6 Credits.

(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.

ASTR 292 - Independent Study. 1-6 Credits.

Course material appropriate to the needs and objectives of the individual student.

ASTR 351 - Planetary Science. 3 Credits.

Offered autumn even-numbered years. Prereq., PHSX 215N - PHSX 216N or PHSX 205N - PHSX 206N and M 162 or M 171. Physical and geological characteristics of planets, satellites, asteroids, comets, and meteoroids, with an emphasis on comparative planetology.

ASTR 353 - Galactic Astrophysics. 3 Credits.

Offered spring odd-numbered years. Prereq., ASTR 132N or ASTR 142N, and PHSX 217N - PHSX 218N or PHSX 207N - PHSX 208N, and 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. 3 Credits.

Offered autumn even-numbered years. Prereq., ASTR 132N or ASTR 142N, and PHSX 207N - PHSX 208N or PHXS 217N - PHSX 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. 3 Credits.

Offered autumn odd-numbered years. Prereq., ASTR 132N or ASTR 142N, and PHSX 207N- PHSX 208N or PHSX 217N- PHSX 218N, and prereq., or coreq., M 273. 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. 3 Credits.

Offered spring even-numbered years. Prereq., ASTR 363. Continuation of ASTR 363.

ASTR 391 - Special Topics. 1-9 Credits.

(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. 1-6 Credits.

Course material appropriate to the needs and objectives of the individual student.

ASTR 398 - Internship. 1-6 Credits.

(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.

ASTR 492 - Independent Study. 1-12 Credits.

ASTR 494 - Senior Capstone Seminar. 1 Credit.

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. 1 Credit.

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.

Athletic Training (ATEP) < University of Montana

Athletic Training (ATEP)

ATEP 534 - Athletic Training Techniques I. 3 Credits.

Prereq., Athletic Training Student. Serves as an introduction to athletic training practice. Emphasis on the prevention, care, and management of acute injuries and illnesses, as well as risk management, environmental concerns, and protective taping and equipment. Level: Graduate

ATEP 535 - Athletic Training Techniques II. 3 Credits.

Provides an investigation into the study of evidence based medicine, epidemiology and injury surveillance, cultural competency, and mental health issues. Level: Graduate

ATEP 540 - Practicum in Athletic Training I. 3 Credits.

Prereq., Athletic Training Student. Builds on skills previously acquired and introduces new skills related to current coursework. Students will be assigned to a clinical education rotation under the direct supervision of a clinical preceptor. First in the series of four practicum courses. Level: Graduate

ATEP 541 - Practicum in Athletic Training II. 3 Credits.

Prereq., Athletic Training Student. Expands on skills previously acquired and introduces new skills related to current coursework. Students will be assigned to a clinical education rotation under the direct supervision of a clinical preceptor. Second in the series of four practicum courses. Level: Graduate

ATEP 542 - Lower Extremity Assessment. 3 Credits.

Prereq., Athletic Training Student. Provides a study of anatomy and physiology, assessment, evaluation techniques, treatment, and management of conditions affecting the lower extremities and lumbar spine. Level: Graduate

ATEP 544 - Upper Extremity Assessment. 3 Credits.

Prereq., Athletic Training Student. Provides a study of anatomy and physiology, assessment, evaluation techniques, treatment, and management of conditions affecting the upper extremities, head, and thoracic and cervical spine. Level: Graduate

ATEP 546 - General Medical Assessment. 3 Credits.

Prereq., Athletic Training Student. Examines the recognition, assessment, and management of general medical conditions and illnesses. Level: Graduate

ATEP 550 - Practicum in Athletic Training III. 3 Credits.

Prereq., Athletic Training Student. Broadens skills previously acquired and introduces new skills related to current coursework. Students will be assigned to a clinical education rotation under the direct supervision of a clinical preceptor. Third in the series of four practicum courses. Level: Graduate

ATEP 551 - Practicum in Athletic Training IV. 3 Credits.

Prereq., Athletic Training Student. Reviews and refines skills previously acquired and evaluated in previous coursework. Students will be assigned to a clinical education rotation under the direct supervision of a clinical preceptor. Fourth in the series of four practicum courses. Level: Graduate

ATEP 566 - Therapeutic Modalities. 3 Credits.

Offered spring. Prereq., ATEP 550. Physiology, indications, contraindications, and the application of therapeutic modalities for athletic injuries. Level: Graduate

ATEP 569 - Clinical Anatomy Laboratory. 1 Credit.

Offered Fall. Prereq., Athletic Training Student. Clinical applications of anatomy in Athletic Training. Laboratory time for practical applications including prosected cadavers, surface anatomy, osteology, radiology, functional analysis of movement, applied clinical anatomy and sports application. Level: Graduate

ATEP 572 - Therapeutic Exercise. 3 Credits.

Offered spring. Prereq., ATEP 566. Theories and application methods of comprehensive therapeutic exercise programs for athletic injuries. Level: Graduate

ATEP 574 - Manual Therapy Techniques. 3 Credits.

Offered summer. Prereq., ATEP 572. Theories and application methods of comprehensive manual therapy for athletic injuries. Level: Graduate

ATEP 578 - Organization & Administration in Athletic Training. 3 Credits.

Prereq., Athletic Training Student. Explores leadership, organization, administration, and legal issues in athletic training. Topics include leadership; insurance; ethics; professional development; the planning, organization, operations, and assessment of athletic training programming and facilities. Fiscal and risk management will also be examined. Level: Graduate

ATEP 580 - Pharmacology for Sports Medicine. 3 Credits.

Prereq., graduate level student. Explores the pharmaceutical and chemical processes of therapeutic interventions and therapies. This course examines the constraints placed on patients in the performance environment as well management, protocols, and legal issues. Level: Graduate

ATEP 599 - Research Capstone in Athletic Training. 3 Credits.

This course explores quantitative and qualitative research methodologies used in athletic training and evaluation of published research in the field. The capstone activity involves designing a research project with a culminating research presentation. Basic format and organization issues are covered, along with how to identify a research topic, access resources, and write a literature review.

Biochemistry (BCH) < University of Montana

Biochemistry (BCH)

BCH 110 - Intro Biology for Biochemists. 3 Credits.

Offered spring. Prereq. CHMY 141N/142N or equivalent. Prereq. or Coreq., CHMY 143N/144N. 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. 1 Credit.

Offered spring. Prereq., CHMY 141N/142N or equivalent. Prereq., or Coreq., CHMY 143N/144N. 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. 1 Credit.

Offered spring. Prereq., BIOB 260 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. 4.000 Credits.

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. 3 Credits.

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. Level: Undergraduate-Graduate

BCH 482 - Advanced Biochemistry II. 3 Credits.

Offered spring. Prereq., BCH 480 or equiv. Continuation of BCH 480. Enzyme kinetics, metabolism, especially macromolecule biosynthesis and energy acquisition pathways, and the associated energetics and molecular physiology. Credit not allowed for both BCH 380 and BCH 480-482. Level: Undergraduate-Graduate

BCH 486 - Biochemistry Research Lab. 3 Credits.

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. Level: Undergraduate-Graduate

BCH 490 - Undergraduate Research. 1-10 Credits.

(R-10) Offered every term. Consent of instr. Independent research under the direction of a faculty member. Level: Undergraduate

BCH 491 - Special Topics. 1-10 Credits.

(R-10) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. Level: Undergraduate-Graduate

BCH 498 - Internship/Cooperative Ed. 1-15 Credits.

(R-15) 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. Level: Undergraduate-Graduate

BCH 499 - Senior Thesis/Capstone. 3-6 Credits.

(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. Level: Undergraduate

BCH 547 - Exptl Mol/Cell/Chem Biol. 1 Credit.

(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. 1 Credit.

(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. 1 Credit.

(R-2) 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. 3 Credits.

Offered spring odd-numbered years. Prereq., 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. 3 Credits.

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. 3 Credits.

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. 1-6 Credits.

(R-6) Offered intermittently. Prereq., graduate standing and consent of instr. Experimental offering of new courses by resident or visiting faculty. Level: Graduate

BCH 597 - Research. 1-18 Credits.

(R-18) Offered autumn and spring. Directed individual research and study appropriate to the background and objectives of the student. Level: Graduate

BCH 599 - Thesis. 1-10 Credits.

(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. 3 Credits.

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. 1 Credit.

(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. 1-20 Credits.

(R-20) Offered intermittently. Prereq., doctoral student in biochemistry. Laboratory research for and preparation of a doctoral dissertation. Level: Graduate

Biology (BIOL) < University of Montana

Biology (BIOL)

BIOL 315 - Peer Advising Internship. 1 Credit.

(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. 3 Credits.

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. 3 Credits.

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.

Biology - Ecological (BIOE) < University of Montana

Biology - Ecological (BIOE)

BIOE 172N - Introductory Ecology. 3 Credits.

Offered intermittently. An introduction to ecological principles, stressing the structure and function of natural communities and examining human's role in these ecosystems.

Gen Ed Attributes: Natural Science Course (N)

BIOE 342 - Field Ecology. 5 Credits.

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. 3 Credits.

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). 2 Credits.

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. 2 Credits.

Offered autumn. Preparatory readings and attendance at seminars on a wide variety of ecological and wildlife management topics followed by critiques.

BIOE 400 - Aquatic Microbial Ecology. 3 Credits.

Offered summer only at the Flathead Lake Biological Station. Prereq., BIOB 170N, CHMY 121N, and one year of college math, or consent of instructor. This course is an immersive (2 week) summer class offered to both undergraduate and graduate students with interests in microbiology and ecology. The course includes lectures, laboratories, and several field-based sampling trips. The course provides conceptual foundation and hands-on field and laboratory training in modern methods in aquatic microbial ecology.

BIOE 403 - Comparative Vert Anatomy. 4 Credits.

Offered autumn. Prereq., BIOB 260 or BIOB 272. Comparative study of vertebrate morphology using evolutionary transitions among species to explore design and function. Laboratory includes systematic study of organ systems and workshops in the dynamics of biomechanics and functional morphology.

BIOE 406 - Behavior & Evolution. 3 Credits.

Offered autumn, odd-numbered years. 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. 1 Credit.

Offered autumn, odd-numbered years. 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. 3 Credits.

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. 5.000 Credits.

Offered spring. Prereq., BIOB 160N and either CHMY 123 or 143N. Physical and chemical dynamics of lakes and streams. Diversity, distribution and dynamics of freshwater organisms.

BIOE 439 - Stream Ecology. 3 Credits.

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. 3 Credits.

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 - Ecosystem Ecology. 3 Credits.

Offered spring, odd-numbered 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 balances, carbon cycling, nutrient cycling, trophic dynamics, and species effects on ecosystem functioning across terrestrial and aquatic ecosystems.

BIOE 448 - Terrestrial Plant Ecology. 4 Credits.

Offered intermittently. Prereq. BIOB 272. The interrelationships between plants and plant communities and their natural environment.

BIOE 449 - Plant Biogeography. 3 Credits.

Offered intermittently. Prereq., consent of instr. 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. 3 Credits.

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. 3 Credits.

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. 3 Credits.

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. 1-10 Credits.

(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. 1-4 Credits.

(R-12). Offered intermittently. Prereq. graduate standing. Presentations by student, faculty, and associates on issues and topics in their field.

Biology - Organismal (BIOO)

BIOO 101N - Survey MT Wildlife & Habitats. 3 Credits.

Offered online autumn. Prereq., one course in biology. Interpreting biological patterns associated with selected Montana wildlife species, including mammals, birds, reptiles and amphibians.

Gen Ed Attributes: Natural Science Course (N)

BIOO 105N - Introduction to Botany. 3 Credits.

Offered spring. Introduction to the plant kingdom including anatomy, physiology and ecology.

Gen Ed Attributes: Natural Science Course (N)

BIOO 320 - General Botany. 5 Credits.

Offered autumn. Prereq., BIOB 260 and BIOB 272. Anatomy, morphology, ecology and physiology of photosynthetic organisms.

BIOO 335 - Rocky Mountain Flora. 3 Credits.

Offered spring and summer. 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 Mgmnt of Fishes. 4 Credits.

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. 3 Credits.

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. 1 Credit.

Offered spring. Prereq or coreq., BIOO 433. Laboratory exercises designed to familiarize students with concepts and techniques in plant physiology.

BIOO 462 - Entomology. 4 Credits.

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. 4 Credits.

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. 4 Credits.

Offered autumn. Prereq., BIOB 272. The evolution, systematics, anatomy, physiology and ecology of mammals.

BIOO 490 - Adv Undergrad Research. 1-10 Credits.

(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) < University of Montana

Biology - Systems Ecology (BIOS)

BIOS 532 - Ecosystem Ecology. 3 Credits.

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. 3 Credits.

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 594 - Seminar. 1-6 Credits.

Offered intermittently. Prereq. graduate standing. Presentations by student, faculty, and associates on issues and topics in their field. Level: Graduate

BIOS 595 - Special Topics. 1-4 Credits.

(R-8) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

BIOS 597 - Research. 1-10 Credits.

(R-10) Prereq., consent of instr. Directed individual research and study appropriate to the back ground and objectives of the student. Level: Graduate

BIOS 599 - Thesis. 1-10 Credits.

(R-10) Field and laboratory research on, and writing of, a student's masters thesis. Level: Graduate

BIOS 699 - Thesis. 1-10 Credits.

(R-10) Field and laboratory research on, and writing of, a student's masters thesis. Level: Graduate

Biology-General (BIOB)

BIOB 101N - Discover Biology. 3 Credits.

Offered every term. Offered on Mountain Campus and at Missoula College. 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. Gen Ed Attributes: Natural Science Lab Course (N)

Gen Ed Attributes: Natural Science Course (N)

BIOB 109N - Montana Ecosystems. 3 Credits.

Offered autumn and spring. Offered at Missoula College. 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. Gen Ed Attributes: Natural Science Lab Course (N)

Gen Ed Attributes: Natural Science Course (N)

BIOB 130N - Evolution and Society. 3 Credits.

Offered intermittently. 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.

Gen Ed Attributes: Natural Science Course (N)

BIOB 160N - Principles of Living Systems. 3 Credits.

Offered every term. 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. Students requiring a laboratory should also register for BIOB 161N. Credit not allowed for both BIOB 101N and 160N.

Gen Ed Attributes: Natural Science Course (N)

BIOB 161N - Prncpls of Living Systems Lab. 1 Credit.

Offered autumn and summer. Prereq., or Coreq., BIOB 160N. Lab experiences illustrate biological principles underlying growth, reproduction, development, genetics and physiology, and are designed to give students practice in scientific methods of description, development of hypotheses, and testing. Gen Ed Attributes: Natural Science Lab Course (N)

Gen Ed Attributes: Natural Science Course (N)

BIOB 170N - Princpls Biological Diversity. 3 Credits.

Offered spring and summer. Survey of the diversity, evolution and ecology of life including prokaryotes, viruses, protista, fungi, plants and animals.

Gen Ed Attributes: Natural Science Course (N)

BIOB 171N - Princpls Biological Dvrsty Lab. 2 Credits.

Offered spring and summer. Prereq. or Coreq., BIOB 170N. The diversity of life including prokaryotes, viruses, protista, fungi, plants and animals including structure and evolutionary relationships. Gen Ed Attributes: Natural Science Lab Course (N)

Gen Ed Attributes: Natural Science Course (N)

BIOB 191 - Special Topics. 1-6 Credits.

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

BIOB 191N - Special Topics. 1-6 Credits.

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

BIOB 198 - Internship. 1-6 Credits.

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.

BIOB 210N - Communicating Biology. 3 Credits.

Offered autumn and spring. Offered at Missoula College. Prereq., WRIT 101 or equivalent. An examination of modern methods for sharing scientific discovery with an emphasis on biological issues related to the human experience.

Gen Ed Attributes: Natural Science Course (N), Writing Course-Intermediate

BIOB 226N - Gen Science: Earth & Life Sci. 5 Credits.

Offered spring. Prereq., or coreg M 132 or M 135. Integrated lectures, laboratory exercises, and field trips on topics in earth and biological science for prospective elementary school teachers and the non-scientist. 2, two-hour laboratory sessions are required each week. Gen Ed Attributes: Natural Science Lab Course (N)

Gen Ed Attributes: Natural Science Course (N)

BIOB 260 - Cellular and Molecular Biology. 4 Credits.

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 143N. 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. 4 Credits.

Offered spring. Prereq., either (BIOB 260) OR (both BIOB 160N and BIOB 170N) OR (just BIOB 160N with a B- or better); 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. 1-6 Credits.

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

BIOB 295 - Student Teaching. 1-6 Credits.

(R-6) Offered intermittently. Offered at Missoula College. Organized student teaching.

BIOB 298 - Internship. 1-6 Credits.

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.

BIOB 301 - Developmental Biology. 3 Credits.

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. 3 Credits.

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. 1-10 Credits.

(R-10) Offered every term. Prereq., consent of instr. Independent research under the direction of a faculty member. Graded credit/no credit.

BIOB 391 - Special Topics. 1-10 Credits.

(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. 1-10 Credits.

(R-10) Offered every term. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

BIOB 395 - Practicum. 1-12 Credits.

BIOB 398 - Internship. 1-6 Credits.

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.

BIOB 410 - Immunology. 3 Credits.

Offered autumn. Prereq., BIOB 260. Current concepts and methods in Immunology.

BIOB 411 - Immunology Laboratory. 2 Credits.

Offered autumn. Prereq., or Coreq., BIOB 410. Modern techniques for analysis of immune responses.

BIOB 425 - Adv Cell & Molecular Biology. 3 Credits.

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. 2 Credits.

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 467 - Molecular Analysis of Dev. 2 Credits.

(R-12) Offered alternate spring (UM campus, face-to-face). Prereq. Consent of Instructor. This course covers key topics in developmental biology through the detailed study of the primary literature. Seminar topics are updated for each year the course is offered and listed in syllabus. With help of the instructor, the students present each topic and lead a discussion each class period based on the assigned research paper and one or two review articles to provide background on the topic. CR/NCR only (no letter grade). Level: Undergraduate

BIOB 468 - Endocrinology. 3 Credits.

Offered intermittently. 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. 3 Credits.

Offered spring. 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. 3 Credits.

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. 3 Credits.

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 488 - Programming for Biology. 3 Credits.

Offered intermittently. Prereq., BIOB 486 or A- or higher in BIOB 272. An introduction to computer programming using genomic and evolutionary examples. No prior programming experience expected or required.

BIOB 490 - Adv Undergrad Research. 1-10 Credits.

(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.

BIOB 491 - Special Topics. 1-10 Credits.

(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. 1-10 Credits.

Offered every term. Prereq., consent of instr. Independent work under the University omnibus option. See index.

BIOB 494 - Seminar in Biology. 1 Credit.

(R-3) Offered intermittently. Prereq., consent of instr. A review and discussion of current research. Topics vary.

BIOB 495 - Practicum. 1-12 Credits.

BIOB 498 - Internship. 1-6 Credits.

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.

BIOB 499 - Undergraduate Thesis. 3-6 Credits.

(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.

BIOB 505 - OBE Core Course - Genetics and Evolution. 4 Credits.

Offered every other autumn. Prereq., graduate standing. Exploration of the fundamental concepts and approaches in evolutionary biology, functional biology and evolutionary genetics with evolutionary ecology woven throughout. Lectures and discussions, with an emphasis on primary literature, classic and contemporary. Level: Graduate

BIOB 506 - OBE Core Course - Ecology. 4 Credits.

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 ecological theory with relevant topics in evolutionary ecology and functional biology woven throughout. Level: Graduate

BIOB 513 - Community Ecology. 3 Credits.

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 518 - Plant-Consumer Interactions. 3 Credits.

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. 1 Credit.

(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. 3 Credits.

Offered alternate years. Prereq., BIOE 370 and BIOO 433. The physiological basis of plant adaptation and response to the environment. Level: Graduate

BIOB 541 - Electron Microscopy Lab. 1-6 Credits.

(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. 1 Credit.

(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. 1-3 Credits.

(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. 1-2 Credits.

(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. 1 Credit.

(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 567 - Molecular Analysis of Development. 2 Credits.

(R-12) Offered alternate spring (UM campus, face-to-face). Prereq. Consent of Instructor. This course covers key topics in developmental biology through the detailed study of the primary literature. Seminar topics are updated for each year the course is offered and listed in syllabus. With help of the instructor, the students present each topic and lead a discussion each class period based on the assigned research paper and one or two review articles to provide background on the topic. CR/NCR only (no letter grade). Level: Graduate

BIOB 594 - Seminar in Biology. 1 Credit.

(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. 1-4 Credits.

(R-22) Prereq., graduate standing and consent of instr. Experimental offering of new courses by resident or visiting faculty. Level: Graduate

BIOB 596 - Independent Study. 1-8 Credits.

(R-8) Prereq., consent of instr. Credit for independent research project unrelated to thesis or dissertation. Level: Graduate

BIOB 597 - Research. 1-8 Credits.

(R-12) Prereq., consent of instr. Library work involved with preparation of a thesis or dissertation proposal. Level: Graduate

BIOB 598 - Internship. 1-8 Credits.

(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

BIOB 599 - Thesis. 1-10 Credits.

(R-10) Prereq., masters student in biology. Field and laboratory research on, and writing of, a student's master's thesis. Level: Graduate

BIOB 695 - Special Topics. 10 Credits.

(R-10) Prereq., graduate standing and consent of instr. Experimental offering of new courses by resident or visiting faculty. Level: Graduate

BIOB 699 - Dissertation. 1-10 Credits.

(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-Human (BIOH)

BIOH 108 - Basic Anatomy. 4 Credits.

Offered intermittently. Offered at Missoula College. A one semester course with laboratory focusing on learning the scientific principles of anatomy leading to a general understanding of the functional anatomy of the body's architecture and systems.

BIOH 112 - Human Form and Function I. 3 Credits.

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. 3 Credits.

Offered spring. Explores the fundamental structures and functions of the endocrine, cardiovascular, respiratory, digestive, urinary and reproductive systems.

BIOH 191 - Special Topics. 1-6 Credits.

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

BIOH 201N - Human Anat Phys I (equiv 301). 4 Credits.

Offered autumn and spring. Offered at Missoula College. 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. Gen Ed Attributes: Natural Science Lab Course (N)

Gen Ed Attributes: Natural Science Course (N)

BIOH 202N - Human Anat and Phys I Lab. 0 Credits.

Offered autumn and spring. Offered at Missoula College. Coreq., BIOH 201N. Required companion laboratory for BIOH 201N. Comprehensive study of tissues and gross human anatomy necessary for students in health-related programs. Emphasis on typical structure and function as they relate to health. Topics include tissues through nervous system. Laboratory activities include some dissection and study of human cadaver. Gen Ed Attributes: Natural Science Lab Course (N)

Gen Ed Attributes: Natural Science Course (N)

BIOH 211N - Human Anat Phys II (equiv 311). 4 Credits.

Offered autumn and spring. Offered at Missoula College. Prereq., BIOH 201N/202N. 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. Gen Ed Attributes: Natural Science Lab Course (N)

Gen Ed Attributes: Natural Science Course (N)

BIOH 212N - Human Anat Phys II Lab. 0 Credits.

Offered autumn and spring. Offered at Missoula College. Prereq., BIOH 201N/202N. Coreq., BIOH 211N. Required companion laboratory for BIOH 211N. 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. Gen Ed Attributes: Natural Science Lab Course (N)

Gen Ed Attributes: Natural Science Course (N)

BIOH 213N - The Biology of Behavior. 3 Credits.

Offered spring. Offered at Missoula College. Prereq., BIOB 101N. 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.

BIOH 261 - Human Physiology lab. 4 Credits.

Offered autumn based on demand. Offered at Missoula College. Prereq., BIOH 201N/202N, 211N/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, and 211N/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 280 - From Molecules to Mind - Fundamentals of Neuroscience. 3 Credits.

Offered spring. Prereq., PSYX 250N. 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. 1-6 Credits.

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

BIOH 295 - Student Teaching. 1-6 Credits.

(R-6) Offered intermittently. Offered at Missoula College. Organized student teaching.

BIOH 330 - Anat & Phys Speech Mech. 3 Credits.

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.

BIOH 365 - Human Anatomy and Physiology for Health Professions I. 3 Credits.

Offered autumn. 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 366 - Human Anatomy and Physiology for Health Professions I Laboratory. 1-2 Credits.

Offered autumn. Prereq., or Coreq., BIOH 365. Laboratory-based instruction in 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. The laboratory uses cadavers and models.

BIOH 370 - Human Anatomy and Physiology for Health Professions II. 3 Credits.

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.

BIOH 371 - Human Anatomy and Physiology for Health Professions II Laboratory. 1-2 Credits.

Offered spring. Prereq., or Coreq., BIOH 370. Laboratory-based instruction in 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. The laboratory uses cadaver prosections and models.

BIOH 380 - Cellular and Molecular Neuroscience. 3 Credits.

Offered spring. Prereq., BIOB 260 and BIOH 280. 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 398 - Internship. 1-6 Credits.

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.

BIOH 405 - Hematology. 3 Credits.

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. 1-3 Credits.

(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. 1-3 Credits.

(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 441 - CNS Diseases. 3 Credits.

Offered autumn. Prereq., BIOH 280, BIOB 260, and BIOB 272. 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.

BIOH 456 - Cadaver Dissection I. 2 Credits.

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. 2 Credits.

Offered spring. Prereq., Grade of 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. 4 Credits.

Offered every term. 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.

Gen Ed Attributes: Writing Course-Advanced

BIOH 461 - Human Anat/Phys I Tutor/Honors. 3 Credits.

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. 3 Credits.

Offered spring. Prereq., WRIT 101 or equivalent, and one intermediate writing course, C (2.00) or better in BIOH 365, 370, and either CHMY 123 or 143N or consent of instr. An advanced course in human physiology for students preparing for careers in health care.

Gen Ed Attributes: Writing Course-Advanced

BIOH 463 - Human Anat/Phys II Tutor/Honor. 3 Credits.

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. 12 Credits.

Offered summer. Prereq., successful completion of medical laboratory science 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 laboratory science).

BIOH 471 - Professional Training I. 13 Credits.

Offered autumn. Prereq., BIOH 470. Continuation of BIOH 470. Professional training at clinical site(s).

BIOH 472 - Professional Training II. 12 Credits.

Offered spring. Prereq., BIOH 471. Continuation of BIOH 471. Professional training at clinical site(s).

BIOH 480 - Tchg Anatomy & Physiology I. 3-4 Credits.

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. 3-4 Credits.

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. 1-10 Credits.

(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-Microbiology (BIOM)

BIOM 227 - Vectors and Parasites. 3 Credits.

Offered autumn. 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. 3 Credits.

Offered spring and summer. 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.

Gen Ed Attributes: Natural Science Course (N)

BIOM 251 - Microbiology Hlth Sciences Lab. 1 Credit.

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. 1-6 Credits.

(R-6) Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

BIOM 360 - General Microbiology. 3 Credits.

Offered autumn and summer. Prereq., CHMY 123 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. 2 Credits.

Offered autumn. Prereq. or coreq., BIOM 360. Basic microbiology procedures and techniques.

BIOM 390 - Undergraduate Research. 1-6 Credits.

(R-10) Offered every term. Prereq., consent of instr. Independent research under the direction of a faculty member. Graded credit/no credit.

BIOM 402 - Medical Bacteriology& Mycology. 3 Credits.

Offered spring. Prereq., BIOM 360, 361. A study of the pathogenic bacteria and fungi and the diseases they produce.

BIOM 403 - Medicl Bacteriolgy & Myclgy Lb. 2 Credits.

Offered spring. Prereq. or coreq., BIOM 402. Laboratory study of pathogenic bacteria and fungi.

BIOM 407 - Clinical Diagnosis. 2 Credits.

Offered spring. Prereq., BIOM 360-361 or BIOH 365/366 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. 1 Credit.

Offered spring. Prereq., or coreq., BIOM 407. Clinical diagnostic methods.

BIOM 410 - Microbial Genetics. 3 Credits.

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. 1 Credit.

Offered spring. Prereq. or coreq., BIOM 410. Experiments in microbial genetics: Analysis of genes and genomes.

BIOM 415 - Microbial Dvrsty Eclgy & Evltn. 3 Credits.

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. 2 Credits.

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. 2 Credits.

Offered autumn. Coreq., BIOM 427. Taxonomy, morphology and identification of parasitic protozoa, helminths and arthropods.

BIOM 435 - Virology. 3 Credits.

Offered spring. Prereq., BIOB 260, and BIOM 360. The general nature of viruses, with emphasis on the molecular biology of animal and human viruses. Co-convenes with BIOM 535.

BIOM 450 - Microbial Physiology. 3 Credits.

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. 1 Credit.

Offered autumn. Coreq., BIOM 450. Experimental approaches to analysis of microbial structure, composition and metabolism.

BIOM 460 - Ecology of Infectious Diseases. 3 Credits.

Offered spring. In this course, we will take an ecological approach to understand infectious diseases. We will examine how diseases spread through time and space, and examine mathematical models of disease spread and their usefulness in control strategies. We will discuss case studies of both human and animal diseases, and the ecological concepts that apply to a wide range of systems.

BIOM 490 - Adv Undergrad Research. 1-10 Credits.

(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.

BIOM 491 - Special Topics. 1-10 Credits.

(R-10) Offered intermittently. Experimental offerings of new courses, experimental offerings of visiting professors, or one-time offerings of current topics.

BIOM 494 - Seminar. 1 Credit.

(R-3) Offered intermittently. Prereq., senior standing in natural sciences. Recent topics in microbiology and related subjects.

BIOM 498 - Internship. 1-6 Credits.

(R-6) Offered every term. Prereq., consent of instr. Extended classroom experience which provides practical application of classroom learning during placements off campus.

BIOM 499 - Undergraduate Thesis. 3-6 Credits.

(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.

BIOM 502 - Advanced Immunology. 3 Credits.

Offered autumn even-numbered years. Advanced topics and immunological techniques used in modern immunology. Level: Graduate

BIOM 535 - Advanced Virology. 3 Credits.

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

BIOM 540 - Microbial Pathogenesis. 3 Credits.

Offered fall. Prereq., graduate standing. Current concepts in pathogenesis at the molecular and cellular levels. Focus is on microbial (virla, bacterial) and genetic factors leading to disease and the host's involvement in the process. Level: Graduate

BIOM 545 - Adv Topics in Microb Ecol. 1 Credit.

(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. 1 Credit.

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. 1 Credit.

(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. 1 Credit.

(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. 1-3 Credits.

(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

BIOM 596 - Independent Study. 1-6 Credits.

(R-6) Prereq., consent of instr. Credit for independent research project unrelated to thesis or dissertation. Level: Graduate

BIOM 597 - Research. 1-18 Credits.

(R-18) Offered intermittently. Prereq., graduate standing, one semester residence. Level: Graduate

BIOM 599 - Thesis. 1-10 Credits.

(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. 1-20 Credits.

(R-20) Offered intermittently. Prereq., doctoral student in microbiology. Laboratory research for and preparation of a doctoral dissertation. Level: Graduate

Biomedical /Pharmaceutical Sci (BMED)

BMED 291 - Special Topics. 1-6 Credits.

(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.

BMED 545 - Research Lab Rotations PharmSci. 1-3 Credits.

(R-6) Offered autumn and spring. Experience in research methods in departmental research laboratories. Level: Graduate

BMED 581 - Research Seminar PharmSci. 1 Credit.

(R-9) Offered autumn and spring. Oral and written presentations of experimental research results and selected literature topics in the pharmaceutical sciences. Level: Graduate

BMED 582 - Research Seminar Neurosci.. 1 Credit.

(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. 1 Credit.

(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. 1 Credit.

(R-6) Offered autumn and spring. Readings and discussion of current research literature. Level: Graduate

BMED 594 - Seminar. 1 Credit.

(R-6) Offered autumn and spring. Prereq., senior or graduate standing. Level: Graduate

BMED 595 - Special Topics. 1-9 Credits.

(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. 1-9 Credits.

(R-9) Offered every term. Level: Graduate

BMED 597 - Research (MS). 1-9 Credits.

(R-10) Offered every term. Level: Graduate

BMED 599 - Thesis (MS). 1-9 Credits.

(R-10) Offered every term. Level: Graduate

BMED 605 - Biomedical Research Ethics. 1 Credit.

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. 3 Credits.

Offered autumn. Experimental design and statistical analysis relevant to the biomedical sciences. Level: Graduate

BMED 610 - Neuropharmacology. 3 Credits.

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. 4 Credits.

Offered autumn. Prereq., BIOC 380 or equiv. Fundamentals of pharmacology and drug action. Level: Graduate

BMED 614 - Pharmacology II. 4 Credits.

Offered spring. Prereq., BMED 613. Fundamentals of pharmacology and drug action. Continuation of BMED 613. Level: Graduate

BMED 615 - Molecular Pharmacology. 3 Credits.

Offered alternate years. Prereq., consent of instr. Focus on the basic theories, principles, and practical implications of receptor pharmacology to quantify drug activity. Major emphasis in pharmacodynamics with some time devoted to related pharmacokinetic parameters. Level: Graduate

BMED 620 - Cardiovas Pharm & Tox. 3 Credits.

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. 4 Credits.

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. 4 Credits.

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. 3 Credits.

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. 3 Credits.

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. 3 Credits.

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. 1-3 Credits.

(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. 1 Credit.

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. 1 Credit.

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. 3 Credits.

Offered alternate years. Prereq., BIOC 380 or 481. The genetic basis of differential drug activity. Level: Graduate

BMED 632 - Advanced Pharmacokinetics. 4 Credits.

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 Pharmaceutical Sciences and Drug Design. 1 Credit.

(R-12) Offered autumn and spring. Current topics in the pharmaceutical sciences, including pharmacology, pharmacokinetics, medicinal chemistry, and drug design and development. Level: Graduate

BMED 641 - Toxicology I-Principles. 3 Credits.

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. 3 Credits.

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. 3 Credits.

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. 3 Credits.

Offered alternate years. Prereq., MICB 410 or equiv. The impacts of xenobiotic agents on the immune system. Level: Graduate

BMED 645 - Respiratory Toxicology. 3 Credits.

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. 3 Credits.

Offered alternate years. Prereq., BMED 641 or 661. Mechanisms of major neurotoxins and neurological disease. Level: Graduate

BMED 647 - Topics in Toxicology. 1-3 Credits.

(R-9) Offered autumn or spring. Prereq., BMED 613, or 641, or 661. Current topics in toxicology. Level: Graduate

BMED 657 - Topics in Immunology. 1-3 Credits.

(R-9) Offered autumn or spring. Prereq., MICB 410 or equiv. Current topics in immunology. Level: Graduate

BMED 661 - Neuroscience I. 4 Credits.

Offered autumn. Prereq., BIOC 380 or equiv. Overview of the structure and function of the nervous system. Level: Graduate

BMED 662 - Neuroscience II. 4 Credits.

Offered spring. Prereq., BMED 661. Fundamentals of developmental neuroscience, behavioral and cognitive neuroscience and computational neuroscience. Level: Graduate

BMED 667 - Topics in Neurobiology. 1-3 Credits.

(R-9) Offered every year. Prereq., BMED 661. Current topics in neuroscience. Level: Graduate

BMED 694 - Seminar. 1-3 Credits.

(R-6) Offered autumn and spring. Prereq., senior or graduate standing. Level: Graduate

BMED 695 - Special Topics. 4.000 Credits.

BMED 697 - Research (PhD). 1-9 Credits.

(R-50) Offered every term. Level: Graduate

BMED 699 - Dissertation (PhD). 1-9 Credits.

(R-50) Offered every term. Level: Graduate

Business Finance (BFIN) < University of Montana

Business Finance (BFIN)

BFIN 191 - Special Topics. 1-6 Credits.

(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. 1-3 Credits.

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

BFIN 205S - Personal Finance. 3 Credits.

Offered autumn and spring at Missoula College; intermittently on Mountain Campus. Concepts, strategies and techniques in analyzing financial situations and investment opportunities from the individual's perspective.

Gen Ed Attributes: Social Sciences Course (S)

BFIN 267 - Real Estate Theory and Law. 4 Credits.

Offered intermittently through UM Dept. of Continuing Education. Introduction to the theory and legal issues involved in a real estate transaction.

BFIN 292 - Independent Study. 1-3 Credits.

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

BFIN 298 - Internship. 1-3 Credits.

(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.

BFIN 301 - Analysis of Finan Statements. 3 Credits.

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. 3 Credits.

Offered every term. Prereq., junior major or minor in Business. The methodology and practice of business financial decisions.

BFIN 391 - Special Topics. 1-9 Credits.

(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. 1-6 Credits.

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

BFIN 394 - Undergraduate Seminar. 1-6 Credits.

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

BFIN 410 - $50,000 Portfolio. 3 Credits.

Offered intermittently. Prereq., junior standing in Business, grade of C or better in BFIN 322, and consent of department chair. Students manage a diversified investment portfolio for a semester. Students analyze and discuss investment opportunities and implement their decisions.

BFIN 420 - Investments. 3 Credits.

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 Invtmnt & Analysis. 3 Credits.

Offered intermittently. Prereq., junior standing in Business and BFIN 322 with a C or better, 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. 3 Credits.

Offered spring. Prereq., junior standing in Business, and BFIN 429 with C- or better or BFIN 439 with C- or better, 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. 3 Credits.

Offered spring. Prereq., junior standing in Business, grade of C or better in BFIN 322 and grade of C- or bettern in 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. 3 Credits.

Offered autumn. Prereq., junior standing in Business, grade of C or better in BFIN 322 and grade of C- or better in ECNS 202S 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. 3 Credits.

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. 3 Credits.

Offered autumn. 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. 1-9 Credits.

(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. 1-6 Credits.

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

BFIN 494 - Seminar. 1-6 Credits.

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

BFIN 498 - Internship. 1-3 Credits.

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.

BFIN 522 - Prin Financial Analysis. 3 Credits.

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. 1 Credit.

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. 2 Credits.

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. 1-15 Credits.

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

Business: General (BGEN)

BGEN 105S - Introduction to Business. 3 Credits.

Offered every term. Offered on Mountain Campus and at Missoula College. 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. Gen Ed Attributes: Social Sciences Course (S).

Gen Ed Attributes: Social Sciences Course (S)

BGEN 160S - Issues in Sustainability. 3 Credits.

Offered autumn and spring. Offered at Missoula College. 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.

Gen Ed Attributes: Social Sciences Course (S)

BGEN 220E - Business Ethics and Social Responsibility. 3 Credits.

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.

Gen Ed Attributes: Ethical & Human Values Course

BGEN 235 - Business Law. 3 Credits.

Offered autumn and spring. Offered at Missoula College. 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.

BGEN 291 - Special Topics. 1-6 Credits.

(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. 1-6 Credits.

(R-6) Offered every term. Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student.

BGEN 298 - Internship. 1-6 Credits.

BGEN 360 - International Business. 3 Credits.

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 361 - Principles of Business Law. 3 Credits.

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 391 - Special Topics. 1-6 Credits.

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

BGEN 445 - Sustainability Reporting. 3 Credits.

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.

BGEN 492 - Independent Study. 1-6 Credits.

(R-6) Offered every term. Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student.

BGEN 499 - Strategic Management. 3 Credits.

Prereq., senior standing in Business, COMX 111A, ECNS 202S, BGEN 220E, BFIN 322, BGEN 361, BMGT 322, BMGT 340, and BMKT 325. Analysis of external and internal firm environment and strategy formulation. Integration of cumulative business knowledge. Case orientation and class discussion.

Gen Ed Attributes: Writing Course-Advanced

Business: Management (BMGT) < University of Montana

Business: Management (BMGT)

BMGT 101S - Intro to Entertainment Mgmt. 3 Credits.

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.

Gen Ed Attributes: Social Sciences Course (S)

BMGT 191 - Special Topics. 1-6 Credits.

(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. 1-3 Credits.

(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. 3 Credits.

Offered intermittently. Prereq., WRIT 101 (or higher) or equivalent, 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.

Gen Ed Attributes: Writing Course-Intermediate

BMGT 212 - Critical Analysis for Business. 3 Credits.

Offered autumn and spring. Offered at Missoula College. Prereq., WRIT 101 (or higher) or equivalent. This is an analysis, critical thinking, and writing course for students in the Business Technology fields. Students will also be introduced to traditional Western philosophy through study and discussion of Socrates, Plato and, Aristotle. To that end, students will analyze theories of knowledge and morality in relationship to current events within American Democracy and Law. Students will practice identifying elements of arguments, analyzing elements of arguments for logic, and developing coherent and comprehensive responses to arguments. This course will emphasize practical application rather than purely academic exercise.

Gen Ed Attributes: Writing Course-Intermediate

BMGT 216 - Psych of Mgmt & Supervision. 4 Credits.

Offered autumn and spring. Offered at Missoula College. 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. 3 Credits.

Offered spring. Offered at Missoula College. 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. 4 Credits.

Offered autumn and spring. Offered at Missoula College. 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 275 - Venue Management. 3 Credits.

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. 1-6 Credits.

(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. 1-3 Credits.

(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. 1-3 Credits.

(R-3) Offered autumn. Offered at Missoula College and on Mountain Campus. 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.

BMGT 299 - Capstone:Entrepreneurship. 3 Credits.

Offered spring. Offered at Missoula College. 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.

BMGT 322 - Operations Management. 3 Credits.

Offered every term. Prereq., junior major in Business, CSCI 172. A survey of the processes that organizations, public or private, use to produce goods and services. Includes management science topics.

BMGT 340 - Management & Organization Behavior. 3 Credits.

Offered autumn and spring. Prereq., junior major or minor 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 375 - Business of Film & Television. 3 Credits.

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. 1-6 Credits.

(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. 1-6 Credits.

(R-6) Offered every term. Prereq. junior standing in Business and consent of instr.

BMGT 394 - Seminar/Workshop. 1-3 Credits.

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

BMGT 401 - Event Management. 3 Credits.

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. 3 Credits.

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. 3 Credits.

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. 3 Credits.

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. 3 Credits.

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 444 - Management Communications. 3 Credits.

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.

BMGT 448 - Entrepreneurship. 3 Credits.

Offered autumn and spring. Prereq., junior standing in Business, BMGT 340, BMKT 325; prereq or coreq., BFIN 322. 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 the managerial team. Students develop a business model canvas and/or write a business plan for themselves or for a local entrepreneur.

BMGT 458 - Advanced Entrepreneurship. 1-2 Credits.

(R-3) Offered autumn. Prereq. or coreq, BMGT 448. 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 467 - Global Operations and Supply Chain Management. 3 Credits.

Offered Spring. Prereq., Junior standing in business, and BMGT 322 and BMKT 325, or consent of instructor. The course introduces students to the challenges and opportunities companies face and how they manage the risk associated with the global supply chain. It provides an overview of global supply chain operations management as a field and describes the strategic role it has in todays intensely competitive business environment.

BMGT 474 - Entertainment Rsrch & Planning. 3 Credits.

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. 3 Credits.

Offered spring. 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 491 - Special Topics. 1-6 Credits.

(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. 1-6 Credits.

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

BMGT 493 - International Experience. 1-6 Credits.

(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. 1-6 Credits.

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

BMGT 495 - Practicum. 1-6 Credits.

(R-6) Offered intermittently. Prereq., consent of instr. Organized field experience.

BMGT 498 - Internship. 1-3 Credits.

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.

BMGT 540 - Mgmt & Legal System. 3 Credits.

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. Basic management principles, exploration of concepts such as strategic planning, goal-setting and giving feedback, leadership, motivation, and reward systems. Law as it relates to doing business in the global environment; ethical dimensions of business decision-making. Level: Graduate

BMGT 595 - Special Topics. 1-9 Credits.

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

BMGT 604 - Competitive Strategy. 1 Credit.

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. 2 Credits.

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. 1 Credit.

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.

BMGT 665 - Strategic Mgmt Seminar. 1-12 Credits.

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. 2 Credits.

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

BMGT 696 - Independent Study. 1-9 Credits.

Business: Management Information Systems (BMIS)

BMIS 191 - Special Topics. 1-6 Credits.

(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. 1-3 Credits.

(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. 3 Credits.

Offered every term. Prereq., WRIT 101. Introduces the development, use, and management of computer-based information systems.

BMIS 291 - Special Topics. 1-6 Credits.

BMIS 292 - Independent Study. 1-3 Credits.

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

BMIS 298 - Internship. 1-3 Credits.

(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.

BMIS 326 - Introduction to Data Analytics. 3 Credits.

Offered autumn and spring. Prereq., STAT 216 or SOCI 202 or PSYX 222 or FORS 201. 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. 3 Credits.

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. 3 Credits.

Offered intermittently. Prereq., junior standing in Business. Managing and exploiting organizational data and information. Designing data and information models.

BMIS 372 - Information Infrastructures. 3 Credits.

Offered autumn. 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. 3 Credits.

Offered autumn and spring. 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. 1-9 Credits.

(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. 1-6 Credits.

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

BMIS 394 - Undergraduate Seminar. 1-3 Credits.

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

BMIS 465 - Introduction to Real-time Data Analytics. 3 Credits.

Offered intermittently. Prereq., STAT 216, BMIS 326 or equivalents. Focuses on analyzing big data in motion using commercially available software.

BMIS 471 - Fund of Network & Security Management. 3 Credits.

Offered intermittently. Prereq., junior standing. Current topics will focus on the impact of network technologies and infrastructures on facilitating and supporting business organizations. Students learn about design, installation, and configuration of networks as well as implementing security, networking protocols, and virtualization technologies. Includes a hands-on lab to demonstrate the concepts.

BMIS 472 - Advanced Network & Security Management. 3 Credits.

Offered intermittently. Prereq., junior standing and BMIS 471. Focuses on network security and how it aligns with organizational strategy, directory services for access to organizational information, and cybersecurity management. Includes a hands-on lab to demonstrate the concepts.

BMIS 476 - Integrated Project Mgmt for IS. 3 Credits.

Offered every term Prereq., junior standing in Business and BMIS 326, 365, 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. MIS majors should enroll in this course.

BMIS 478 - E Commerce a Managerl Prspctv. 3 Credits.

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. 3 Credits.

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. Level: Undergraduate

BMIS 482 - Big Data Project. 3 Credits.

Offered autumn and 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. MIS majors are excluded from this course and should take BMIS 476.

BMIS 491 - Special Topics. 1-9 Credits.

(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. 1-6 Credits.

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

BMIS 494 - Seminar. 1-6 Credits.

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

BMIS 495 - Practicum: Information Systems. 3 Credits.

Offered every term. Prereq., junior standing in Business and consent of instr. Practical hands-on experience with area organizations. Provides application of classroom learning.

BMIS 498 - Internship. 1-3 Credits.

(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.

BMIS 541 - Systems & Operations. 3 Credits.

Online course. Offered spring. Prereq., admission to M.B.A. or M-Acct. program or graduate standing with consent of graduate business program director. 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 575 - Fundamentals of Consulting. 3 Credits.

Offered spring. Prereq., graduate standing in Business. The technical, interpersonal, and consulting skills necessary to effectively work with clients. Focuses on management; does not require a technical background. Level: Graduate

BMIS 591 - Special Topics. 1-3 Credits.

(R-3) 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

BMIS 601 - Business Intelligence. 3 Credits.

Offered intermittently. Prereq., graduate standing and BMIS 326. The course provides graduate students with the foundational knowledge necessary to transform big data into useful business intelligence. Students get the skills, tools, and techniques required to collect, synthesize, and distribute information to support intelligent decision-making at the managerial level. Level: Graduate

BMIS 625 - Mining of Text & Unstructured Data. 1 Credit.

Prereq., admission to the MS BA program or instructor consent. An integration of Data Science theory and the actual practice of searching, sorting, relating, and deriving results from textual data. Students will be exposed to machine learning, natural language processing, as well as other computer assisted data mining techniques and then gain hands-on proficiency in the practice of data science using the software from data mining and document analysis vendors. Level: Graduate

BMIS 650 - Quantitative Analysis. 2 Credits.

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. 2 Credits.

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

BMIS 694 - Seminar. 1-6 Credits.

(R-12) Offered intermittently. Prereq., consent of instr. Level: Graduate

BMIS 696 - Independent Study. 1-9 Credits.

Business: Marketing (BMKT) < University of Montana

Business: Marketing (BMKT)

BMKT 109 - Visual Merchandising & Display. 3 Credits.

Offered spring. Offered at Missoula College. 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. 3 Credits.

Offered autumn. Offered at Missoula College. 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 114 - Psychology of Selling. 3 Credits.

Offered autumn and spring. Offered at Missoula College. 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 191 - Special Topics. 1-6 Credits.

(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. 1-3 Credits.

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

BMKT 225 - Marketing. 3 Credits.

Offered autumn. Offered at Missoula College. 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 240 - Advertising. 3 Credits.

Offered spring. Offered at Missoula College. 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. 3 Credits.

Offered spring. Offered at Missoula College. 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.

BMKT 291 - Special Topics. 1-9 Credits.

(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. 1-3 Credits.

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

BMKT 298 - Internship. 1-3 Credits.

(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.

BMKT 325 - Principles of Marketing. 3 Credits.

Offered autumn and spring. Prereq., junior major or minor in Business. The marketing environment, product, price, distribution, and promotion strategies including government regulation and marketing ethics.

BMKT 337 - Consumer Behavior. 3 Credits.

Offered spring. Prereq., junior standing in Business and BMKT 325; PSYX 100S and PSYX 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. 3 Credits.

Offered autumn. 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. 3 Credits.

Offered autumn. 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. 1-9 Credits.

(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. 1-6 Credits.

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

BMKT 412 - Non Profit Marketing. 3 Credits.

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. 3 Credits.

Offered intermittently. Prereq., junior standing. 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. 3 Credits.

Offered autumn or spring. 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. 3 Credits.

Offered 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 460 - Mktg Hi-Tech Prod & Innov. 3 Credits.

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. 3 Credits.

Offered intermittently. Prereq., senior standing in Business; BMKT 325, 337, 342, 343. Case analysis in marketing management.

BMKT 482 - Telling Stories with Data. 3 Credits.

Prereq., junior or senior standing. This course explores how we turn data into stories that can be understood by a nontechnical audience. Students will work with both raw and summarized data from several industries.

BMKT 490 - Undergraduate Research. 3 Credits.

(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 Advertisings National Student Advertising Competition.

BMKT 491 - Special Topics. 1-6 Credits.

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

BMKT 492 - Independent Study. 1-6 Credits.

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

BMKT 493 - International Experience. 1-6 Credits.

(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. 1-6 Credits.

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

BMKT 498 - Internship. 1-3 Credits.

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.

BMKT 560 - Marketing & Stats. 3 Credits.

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 591 - Special Topics. 1-6 Credits.

(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.

BMKT 642 - Advanced Marketing Research. 3 Credits.

Prereq., admission to the MS BA program or instructor consent. The purpose of the course is to learn how to provide information for better business decision making. Students study the different aspects of marketing research as it relates to business problems and develop a mindset that continually relies on information-based decisions. Level: Graduate

BMKT 660 - Marketing Management. 2 Credits.

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

BMKT 670 - Applied Data Analytics. 3 Credits.

Prereq., admission to the MS BA program or instructor consent. This course applies statistical skills and technical expertise to real-world big-data business applications. Students will work with the tools of data science and hone their ability to answer business questions through the analysis of data. Level: Graduate

BMKT 680 - Big Data and Innovation. 3 Credits.

Prereq., admission to the MS BA program or instructor consent. The course provides an integrative, capstone experience for students to reflect on and apply the data science tools they have learned in the program. In addition, this course will focus on the innovation and creativity aspects of big data, or how big data can unleash new insights and innovations that solve customer and societal problems. The course will train future managers to think strategically and innovatively?about data, about opportunity, about value. It will ensure that students are proficient in strategy, customer value and insights. Level: Graduate

BMKT 694 - Seminar. 1-6 Credits.

(R-12) Offered intermittently. Prerq., consent of instr. Level: Graduate

BMKT 699 - Capstone. 3 Credits.

Prereq., BMKT 642, BMKT 670, and BMIS 625, or director consent. Using a project-based approach, the course enables students to synthesize domain knowledge, apply their technical skills, and convey results of their data analysis through data visualizations and clear written and oral communication skills to achieve an integrative perspective of business analytics.

Chemical Addiction Studies (CAS) < University of Montana

Chemical Addiction Studies (CAS)

CAS 140X - Addictions and Diversity. 3 Credits.

Offered autumn and spring. Offered at Missoula College. 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.

Gen Ed Attributes: Cultural Intl Diversity (X)

CAS 185 - Prevention Practices. 3 Credits.

Offered intermittently. Offered at Missoula College. 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. 3 Credits.

(R-6) Offered intermittently. Offered at Missoula College. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

CAS 192 - Independent Study. 1-6 Credits.

(R-6). Course material appropriate to the needs and objectives of the individual student.

CAS 195 - Field Work/Clinical/Practicum. 1-3 Credits.

(R-3) Offered autumn and spring. Offered at Missoula College. Prereq., CAS 185 and CAS 242 and consent of instructor. 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.

CAS 201 - Theories of Counseling. 3 Credits.

Offered spring. Offered at Missoula College. This is an entry level survey course of various approaches to counseling and psychotherapy and is a required course by the state of Montana for Addiction Counselor Licensure. The course is a mixture of lecture, discussion, experiential learning, demonstrations, role playing, viewing counseling sessions, and practice of the major contemporary models of counseling. Ethical and professional issues are also addressed.

CAS 210 - Individual Counseling. 3 Credits.

Offered intermittently. Offered at Missoula College. Prereq., CAS 201 and CAS 242. 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 behavior is presented.

CAS 225 - Group Counseling. 3 Credits.

Offered autumn. Offered at Missoula College. Prereq., CAS 201. 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 behavior in group settings. Includes comprehensive group approaches, family therapy and other appropriate group strategies. Includes group dynamics and strategies to managing group sessions.

CAS 242 - Fund Subst Abuse and Addiction. 3 Credits.

Offered autumn. Offered at Missoula College. This course is offered intermittently 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. 3 Credits.

Offered autumn. Offered at Missoula College. Prereq., CAS 242 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. 3 Credits.

Offered spring. Offered at Missoula College. Prereq., CAS 242 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. 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 Assessment/Documentation/Treatment Planning. 3 Credits.

Offered spring. Offered at Missoula College. Prereq., CAS 242 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. 1-6 Credits.

(R-6) Offered intermittently. Offered at Missoula College. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

CAS 292 - Independent Study. 1-6 Credits.

(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. 1-4 Credits.

(R-4) Offered autumn and spring. Offered at Missoula College. Prereq., CAS 242. 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.

Chemistry (CHMY)

CHMY 099 - Developmental. 1-99.99 Credits.

CHMY 104 - Preparation for Chemistry. 4 Credits.

Offered autumn. Prereq. ALEKS Level 3, M01-Maplesoft Arithmetic score >= 16, M02-Maplesoft Algebra score >=14 or M 090 Introductory Algebra w/RC+ or better. An introduction to concepts and calculations in chemistry that provides preparation for CHMY 121N or CHMY 141N. Not appropriate toward chemistry requirement in any major.

CHMY 121N - Introduction to General Chemistry. 4 Credits.

Offered autumn and spring. First semester of an introduction to general, inorganic, organic and biological chemistry. The course consists of three 1-hour face-to-face lectures per week plus a 1-hour integrated recitation each week.

Gen Ed Attributes: Natural Science Course (N)

CHMY 122 - Introduction to General Chemistry Lab. 1 Credit.

Offered autumn and spring. Prereq., Enrolled in the Missoula College Nursing program. Prereq. or coreq., CHMY 121N or equivalent. A laboratory course emphasizing inorganic chemistry, quantitative relations and synthesis of inorganic and organic compounds.

CHMY 123 - Introduction to Organic and Biochemistry. 4 Credits.

Offered autumn and spring. Prereq., "C-" or equiv. in CHMY 121N or CHMY 141N or consent of instr. Second semester of an introduction to general, inorganic, organic and biological chemistry.

CHMY 124 - Introduction to Organic and Biochemistry Lab. 2 Credits.

Offered autumn and spring. Prereq. or coreq., CHMY 123. Laboratory to accompany CHMY 123.

CHMY 141N - College Chemistry I. 4 Credits.

Offered autumn and spring. Prereq., ALEKS Placement Level 4, M02-Maplesoft Algebra score >= 14 or M 095 Intermediate Algebra w/ RC+ or better and Chemistry Placement Exam score >= 13 or CHMY 104 w/C- or better. Coreq. or Prereq., CHMY 142N. 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.

Gen Ed Attributes: Natural Science Course (N)

CHMY 142N - College Chemistry I Lab. 1 Credit.

Offered Autumn and Spring. Prereq., or Coreq., CHMY 141N. Use of experimental methodologies, scientific questioning and hypothesis driven guided inquiry experiments to explore and understand important fundamental chemical and laboratory concepts including stoichiometry, measurements, molecular structure, and thermodynamics. Gen Ed Attributes: Natural Science Lab Course (N)

Gen Ed Attributes: Natural Science Course (N)

CHMY 143N - College Chemistry II. 4 Credits.

Offered spring and summer. Prereq., "C-" or better in CHMY 141N or consent of instr. Prereq., or Coreq., CHMY 144N. A continuation of CHMY 141N.

Gen Ed Attributes: Natural Science Course (N)

CHMY 144N - College Chemistry II Lab. 1 Credit.

Offered Spring semester. Prereq., or Coreq., CHMY 143N. Continuation of CHMY 142N. Gen Ed Attributes: Natural Science Lab Course (N)

Gen Ed Attributes: Natural Science Course (N)

CHMY 191 - Special Topics/Expmntl Crse. 1-6 Credits.

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

CHMY 192 - Independent Study. 1-10 Credits.

CHMY 195 - Student Teaching. 1-6 Credits.

(R-6) Offered intermittently. Offered at Missoula College. Organized student teaching.

CHMY 221 - Organic Chemistry I. 3 Credits.

Offered autumn. Prereq., CHMY 123N or 143N. The chemical and physical properties of organic compounds.

CHMY 222 - Organic Chemistry I Lab. 2 Credits.

Offered autumn. Coreq., CHMY 221; prereq., one semester of 100-level laboratory. Microscale techniques are emphasized.

CHMY 223 - Organic Chemistry II. 3 Credits.

Offered spring. Prereq., CHMY 221. Continuation of 221.

CHMY 224 - Organic Chemistry II Lab. 2.000 Credits.

Offered spring. Prereq., CHMY 222; prereq. or coreq., CHMY 223.

CHMY 290 - Undergraduate Research. 1-6 Credits.

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

CHMY 291 - Special Topics/Expmntl Crse. 1-6 Credits.

(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. 1-10 Credits.

(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. 1-3 Credits.

(R-6) Offered intermittently. Topic varies.

CHMY 305E - Ethics, Literature and Writing in the Sciences. 3 Credits.

Offered autumn and spring. Prereq., WRIT 101 or equivalent, and one intermediate writing course and CHMY 223 and chemistry or biochemistry majors. Practicum for developing and improving skills in scientific writing and evaluation. Presentation, discussion and written evaluations of standard ethics traditions and ethical issues related to the professional practice of science. Use of library and search tools to access current literature in chemistry.

Gen Ed Attributes: Ethical & Human Values Course, Writing Course-Advanced

CHMY 311 - Analytical Chem-Quant Analysis. 4 Credits.

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. 3 Credits.

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 & Spctrscpy. 4 Credits.

Offered spring. Prereq., CHMY 373. Systematic treatment of the laws and theories relating to chemical phenomena.

CHMY 373 - Phys Chem-Kntcs & Thrmdynmcs. 4 Credits.

Offered autumn. Prereq., CHMY 143N, M 172, and PHSX 217N. Systematic treatment of the laws and theories relating to chemical phenomena.

CHMY 390 - Undergraduate Research. 1 Credit.

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.

CHMY 391 - Special Topics/Expmntl Crse. 1-9 Credits.

(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. 1-9 Credits.

(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. 1 Credit.

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. 1-6 Credits.

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.

CHMY 401 - Advanced Inorganic Chemistry. 3 Credits.

Offered autumn. Prereq., CHMY 223. Theory and principles of inorganic chemistry and a systematic coverage of descriptive inorganic chemistry in the context of the periodic table. Level: Undergraduate-Graduate

CHMY 402 - Advanced Inorganic Chem Lab. 2 Credits.

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. Level: Undergraduate-Graduate

CHMY 403 - Descriptive Inorganic Chem. 3 Credits.

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. Level: Undergraduate

CHMY 411 - Advanced Organic Chemistry. 3 Credits.

Prereqs., CHMY221 and CHMY223 (the sophomore organic chemistry sequence).The course is study of organic chemistry which covers chemoinformatics, structure and conformation, acid-base properties, kinetics/thermodynamics, mechanisms and reactivity, and synthetic strategy and key reactions. Level: Undergraduate-Graduate

CHMY 421 - Advanced Instrument Analysis. 4 Credits.

Offered spring. Prereq., CHMY 311. Theory and use of instrumental methods in the study of analytical and physical chemistry. Level: Undergraduate-Graduate

CHMY 442 - Aquatic Chemistry. 3 Credits.

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. Level: Undergraduate-Graduate

CHMY 465 - Organic Spectroscopy. 3 Credits.

Offered intermittently. Prereq., 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. Enrollment is capped at 16 for this course. Level: Undergraduate-Graduate

CHMY 466 - FT-NMR Optn for Undrgrd Rsrch. 1 Credit.

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: Undergraduate

CHMY 485 - Laboratory Safety. 1 Credit.

Offered autumn. Prereq., one year of college chemistry and permission of instructor. This course is for students who plan to teach high school and middle school science. Legal responsibilities of teachers, awareness of laboratory hazards and how to manage those hazards, resources for information regarding laboratory hazards. Level: Undergraduate-Graduate

CHMY 488 - Forensic Research. 3 Credits.

Offered autumn, spring and summer. Prereq., consent of instr. Laboratory investigations and research on forensic chemistry topics under the direction of a faculty member. Level: Undergraduate

CHMY 489 - Forensic Research Seminar. 1 Credit.

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. Level: Undergraduate

CHMY 490 - Undergraduate Research. 1-9 Credits.

(R-9) Offered autumn, spring, and summer. Prereq., consent of instr. Laboratory investigations and research in the laboratory of a faculty member. Level: Undergraduate

CHMY 491 - Special Topics/Expmntl Crse. 1-9 Credits.

(R-9) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses or one-time offerings of current topics. Level: Undergraduate-Graduate

CHMY 492 - Independent Study. 1-9 Credits.

(R-9) Offered autumn and spring. Prereq., consent of instr. Laboratory investigations and research in the laboratory of a faculty member. Level: Undergraduate-Graduate

CHMY 494 - Seminar/Workshop. 1-9 Credits.

(R-9) Offered autumn and spring. Prereq., consent of instr. Laboratory investigations and research in the laboratory of a faculty member. Level: Undergraduate-Graduate

CHMY 498 - Internship/Cooperative Educ. 1-6 Credits.

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. Level: Undergraduate

CHMY 499 - Senior Thesis/capstone. 3 Credits.

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. Level: Undergraduate

CHMY 501 - Teaching University Chemistry. 1 Credit.

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. 3 Credits.

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. 3 Credits.

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. 3 Credits.

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. 4 Credits.

Offered spring. Prereq., CHMY 401. A survey of the elements including transition metal reaction mechanisms, redox chemistry, organomatallic chemistry, bioinorganic chemistry. Oral and written presentations on primary literature. Level: Graduate

CHMY 562 - Org Structure and Mech. 3 Credits.

Offered intermittently. Prereq., one year of organic chemistry. Topics may include: stereochemistry, conformational analysis, aromaticity, transition sate 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. 3 Credits.

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. 1 Credit.

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. 3 Credits.

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. 3 Credits.

Offered intermittently. Prereq., CHMY 371-373. Fundamental principles of physical chemistry and special applications. Level: Graduate

CHMY 580 - Adv Graduate Res Seminars. 1 Credit.

(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. 3 Credits.

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

CHMY 595 - Special Topics. 1-9 Credits.

(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

CHMY 596 - Independent Study. 1-9 Credits.

(R-9) Offered autumn and spring. Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student. Level: Graduate

CHMY 597 - Research. 1-10 Credits.

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 598 - Internship. 1-8 Credits.

(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

CHMY 599 - Thesis. 1-6 Credits.

(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. 1 Credit.

(R-14) Offered autumn and spring. Prereq., graduate standing in chemistry or biochemistry, or consent of instr. Level: Graduate

CHMY 640 - Intro Grad Seminar. 1 Credit.

(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. 1 Credit.

(R-2) Offered spring. Prereq., graduate standing. A review and discussion of current research. Topics vary. Level: Graduate

CHMY 652 - Original Research Proposal. 1 Credit.

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. 1-10 Credits.

(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. 1-10 Credits.

(R-10) Offered autumn and spring. Preparation of extensive thesis or manuscript based on research for presentation and/or publication. Level: Graduate

Chinese (CHIN)

CHIN 99 - Developmental. 1-99.99 Credits.

CHIN 101 - Elementary Chinese I. 5 Credits.

Offered autumn. Emphasis on speaking, reading and writing elementary Mandarin.

CHIN 102 - Elementary Chinese II. 5 Credits.

Prereq., CHIN 101. Offered spring. Continuation of 101.

Gen Ed Attributes: Foreign Language Requirement

CHIN 191 - Special Topics. 1-9 Credits.

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

CHIN 192 - Independent Study. 1-6 Credits.

CHIN 201 - Intermediate Chinese I. 5 Credits.

Offered autumn. Prereq., CHIN 102 or equiv. Emphasis on oral communication, with continuing development in all major skill areas: listening, speaking, reading and writing.

Gen Ed Attributes: Foreign Language Requirement

CHIN 202 - Intermediate Chinese II. 5 Credits.

Offered spring. Prereq., CHIN 201 or equiv. Continuation of 201.

Gen Ed Attributes: Foreign Language Requirement

CHIN 211H - Chinese Culture and Civiliz. 3 Credits.

Offered intermittently. An introduction to the historical, intellectual, political, literary and social developments of China from early times to the present.

Gen Ed Attributes: Historical Studies

CHIN 291 - Special Topics. 1-9 Credits.

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

CHIN 292 - Independent Study. 1-6 Credits.

(R-6) Offered autumn and spring. Course material appropriate to the needs and objectives of the individual student.

CHIN 301 - Advanced Chinese I. 3 Credits.

Offered autumn. Prereq., CHIN 202 or consent of instr. Advanced Chinese, with emphasis on literary style, advanced grammar, and oral expression.

Gen Ed Attributes: Foreign Language Requirement

CHIN 313L - Chinese Poetry in Translation. 3 Credits.

Offered intermittently. The works of major Chinese poets to 1300 A.D.

Gen Ed Attributes: Lit & Artistic Studies (L)

CHIN 314L - Traditiona Chinese Literature. 3 Credits.

Offered intermittently. Highlights of Chinese literature to 1800; includes philosophy, poetry, prose, and fiction.

Gen Ed Attributes: Lit & Artistic Studies (L)

CHIN 380 - Chinese Folktales. 3 Credits.

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 in Classical Chinese. 3 Credits.

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. 1-12 Credits.

(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. 1-6 Credits.

(R-6) Offered autumn and spring. Course material appropriate to the needs and objectives of the individual student.

CHIN 491 - Special Topics. 1-9 Credits.

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

CHIN 492 - Independent Study. 1-9 Credits.

(R-9) Offered intermittently. Course material appropriate to the needs and objectives of the individual student.

Classics (CLAS)

CLAS 155L - Survey of Greek and Roman Lit. 3 Credits.

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).

Gen Ed Attributes: Lit & Artistic Studies (L)

CLAS 160L - Classical Mythology. 3 Credits.

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.

Gen Ed Attributes: Lit & Artistic Studies (L)

CLAS 170 - Myth Seminar: Honors. 1 Credit.

Offered every spring. Coreq., CLAS 160L. Research, writing, and discussion about the mythologies of the Greeks and Romans in a small group setting.

CLAS 180H - Env & Nat in Classical World. 3 Credits.

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.

Gen Ed Attributes: Historical Studies, Writing Course-Intermediate

CLAS 191 - Special Topics. 1-6 Credits.

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

Gen Ed Attributes: Writing Course-Intermediate

CLAS 192 - Independent Study. 1-6 Credits.

(R-6) Offered autumn and spring.

CLAS 193 - Study Abroad. 1 Credit.

An orientation to the winter session travel program in Greece. It prepares students for overseas travel through an overview of the major historical periods of Ancient Greece. This overview includes an introduction to Greek art and architecture, history, literature, and philosophy. Students will also begin preparations for individual research projects that will present at various sites in Greece. This class will also help students prepare paperwork required by the University for overseas travel programs.

CLAS 198 - Internship. 1-6 Credits.

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.

CLAS 251L - The Epic. 3 Credits.

(R-6) Offered intermittently. Prereq., WRIT 101 (or higher) or equivalent. Reading, study and discussion of epic poems. Selections will vary from Western and non?Western traditions.

Gen Ed Attributes: Lit & Artistic Studies (L), Writing Course-Intermediate

CLAS 252L - Greek Drama: Politics on Stage. 3 Credits.

(R-6) Offered intermittently. Prereq., WRIT 101 (or higher) or equivalent. A study of the literary, artistic and political dimensions of Greek Tragedy and Comedy. Selections will vary.

Gen Ed Attributes: Lit & Artistic Studies (L), Writing Course-Intermediate

CLAS 291 - Special Topics. 1-6 Credits.

(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. 1-6 Credits.

(R-6) Offered autumn and spring.

CLAS 320 - Women in Antiquity. 3 Credits.

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. 3 Credits.

Offered intermittently. Prereq., 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.

Gen Ed Attributes: Historical Studies

CLAS 365E - The Roots of Western Ethics. 3 Credits.

Offered intermittently. Studies of the origins of Western ethical thinking in the writings of Greek writers and their application to current situations.

Gen Ed Attributes: Ethical & Human Values Course

CLAS 391 - Special Topics. 1-9 Credits.

(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. 1-6 Credits.

(R-6) Offered autumn and spring.

CLAS 393 - Study Abroad. 3 Credits.

Prereq., CLAS 193. Site visits include Athens, Knossos, Mycenae, Corinth, Olympia, Delphi and others. Lectures on location in museums and archaeological sites.

CLAS 396 - Practicum. 1-12 Credits.

CLAS 399 - Capstone. 3 Credits.

Prereq., WRIT 101 or equivalent, and one intermediate writing course and LATN 202 and GRK 202 or equivalent and junior standing. The Classics Proseminar serves as a capstone experience and research methodology course required of majors in Classical Languages, Classical Civilizations, and Latin. Students will develop advanced research skills in a variety of interdisciplinary approaches arranged around a seminar topic. Students will have the opportunity to be introduced to advanced topics in Classics including lexicography, epigraphy, palaeography, textual criticism, archaeology, numismatics, etc. The class will culminate in a research symposium during which students will present their research papers.

Gen Ed Attributes: Writing Course-Advanced

CLAS 594 - Graduate Seminar. 1-6 Credits.

(R-6) Offered intermittently. Level: Graduate

CLAS 595 - Special Topics. 1-6 Credits.

(R-6) Offered intermittently. Experimental offering of visiting professors, experimental offerings of new courses or one time offerings of current topics. Level: Graduate

CLAS 596 - Independent Study. 1-6 Credits.

(R-6) Offered intermittently. Level: Graduate

CLAS 598 - Internship. 1-9 Credits.

(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

Climate Change Studies (CCS)

CCS 102 - Intro to Energy Systems II. 3 Credits.

Offered spring. Prereq., NRG 101 or consent of instructor. A survey of renewable energy systems and technologies. Addresses physical and technical aspects of wind, solar, geothermal, hydro, tidal, biological, and wave energy systems. Consideration is given to engineering, economic, social, environmental, and political factors that determine implementation and sustainability.

CCS 103X - Intro Climate Change:Sci & Soc. 3 Credits.

Offered autumn. This is an introductory and foundational course on the scientific and social dimensions of global climate change. The goal of this course is to provide students with a basic understanding of the fundamental scientific, social, political and technological issues arising from rapid climatic change. As a result, it provides students with a breadth of knowledge and builds connectedness across these varied dimensions of the complex global issue.

Gen Ed Attributes: Cultural Intl Diversity (X)

CCS 191 - Energy Practicum. 2 Credits.

Offered intermittently. Prereq., EET 111 or consent of instructor. A practicum that provides students with a supervised field experience. Students gain hands-on experience with energy specific technologies.

CCS 295 - Special Topics. 1-9 Credits.

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

CCS 298 - Internship. 2 Credits.

Offered every term. Consent of instructor required. Extended classroom experience providing practical application of classroom learning through on the job training in a student's field of study. This experience increases student skills, prepares them for initial employment, and increases occupational awareness and professionalism.

CCS 352 - Climate Field Studies. 3 Credits.

Offered summer. This is an interdisciplinary field course focused on climate change impacts and adaptation. Through site visits and meetings with key decision-makers, students gain knowledge of projected impacts due to climate change (water availability, wildfire, beetle kill, biodiversity), the impacts to various sectors of human society (land management, food and water security, economic stability, and livelihoods), and different mitigation and adaptation responses.

CCS 391 - Climate Change Practicum. 2-4 Credits.

Offered autumn and spring. Prereq., consent of instructor. Provides an opportunity for students to design and implement a capstone project involving creative solutions to climate change.

CCS 395 - Special Topics. 1-9 Credits.

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

CCS 398 - Clmt Change Internship/SERV. 2-4 Credits.

(R-6) Offered autumn and spring. This course gives students an opportunity to gain hands-on, "real world" experience working with a local, regional, national or international group to address climate change. Students gain supervised, practical work experience with specific projects and organizations; create a network of professional contacts; and have opportunity to apply ideas and approaches studied in the Climate Change Studies minor.

CCS 494 - Climate Change Study Seminar. 1-4 Credits.

Offered intermittently. A seminar on a current climate change topic.

CCS 495 - Special Topics. 1-9 Credits.

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

Coaching (COA) < University of Montana

Coaching (COA)

COA 405 - Advanced Concepts in Coaching. 3 Credits.

Offered spring. Prereq., junior or senior undergraduate status or graduate status. This class will introduce students to a solid foundation in coaching to include: coaching theories, competitive coaching strategies, training methods and techniques. This course will cover the requirements for the bronze level of the American Sport Education Program (ASEP). Course graded credit/no credit or for a letter grade. The class is appropriate for coaches at all levels but will focus on basic skills of coaching for youth through high school.

COA 494 - Workshop. 1-6 Credits.

(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.

Communication (COMX)

COMX 102 - Interprsnl Skills in Workplace. 1 Credit.

Offered at Missoula College. 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 111A - Introduction to Public Speaking. 3 Credits.

Offered every term. Offered on Mountain Campus and at Missoula College. 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.

Gen Ed Attributes: Expressive Arts Course (A)

COMX 115S - Introduction to Interpersonal Communications. 3 Credits.

Offered autumn and spring. Offered on Mountain Campus and at Missoula College. 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.

Gen Ed Attributes: Social Sciences Course (S)

COMX 140L - Introduction to Visual Rhetoric. 3 Credits.

Offered autumn and spring. Offered at Missoula College. 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.

Gen Ed Attributes: Lit & Artistic Studies (L)

COMX 191 - Special Topics. 1-9 Credits.

(R-9) Offered intermittently. Offered at Missoula College. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

COMX 191S - Special Topics. 1-9 Credits.

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

Gen Ed Attributes: Social Sciences Course (S)

COMX 192 - Independent Study. 1-6 Credits.

(R-6) Offered intermittently. Offered at Missoula College. Course material appropriate to the needs and objectives of the individual student.

COMX 198 - Internship. 1-6 Credits.

(R-6) Offered autumn and spring. Offered at Missoula College. 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 202S - Nonverbal Communication. 3 Credits.

Offered yearly. Nonverbal code systems and how they function in human communication including gestures, facial expressions, personal space, and others.

Gen Ed Attributes: Social Sciences Course (S)

COMX 204X - International and Development Communication. 3 Credits.

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.

Gen Ed Attributes: Cultural Intl Diversity (X)

COMX 205Y - Deliberative Democracy. 3 Credits.

Offered at Missoula College. This course introduces you to the theory and practice of deliberative democracy, in which citizens and other individuals actively participate to help society reach decisions that are just, sound and sustainable. You will learn how deliberative and other participatory democratic processes have been used around the globe to allocate limited resources, meet collective needs, and achieve common goals. You will build your capacities for inquiry, listening to understand, appreciation, reflection, considering multiple perspectives, and finding common ground, all of which are part of dialogue and deliberation. Case studies and hands-on practice will help you appreciate the challenges and opportunities of deliberative democracy. This course will build your capacities to be an informed, engaged and empowered global citizen. Level: Undergraduate

Gen Ed Attributes: Democracy and Citizenship (Y)

COMX 210 - Communication in Small Groups. 3 Credits.

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 212X - Introduction to Intercultural Communication. 3 Credits.

Offered autumn and spring. Offered at Missoula College. 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.

Gen Ed Attributes: Cultural Intl Diversity (X)

COMX 219S - Survey of Children's Comm. 3 Credits.

Offered autumn. Offered at Missoula College. 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.

Gen Ed Attributes: Social Sciences Course (S)

COMX 220S - Introduction to Organizational Communication. 3 Credits.

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.

Gen Ed Attributes: Social Sciences Course (S)

COMX 222 - Professional Communication. 3 Credits.

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 - Introduction to Rhetorical Theory. 3 Credits.

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.

Gen Ed Attributes: Historical Studies

COMX 241 - Persuasive Communication. 3 Credits.

Offered yearly. The use of communication in attitude and behavior change as experienced in personal, organizational, and public contexts.

COMX 242 - Argumentation. 3 Credits.

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 250 - Intro to Public Relations. 3 Credits.

Offered autumn and spring. Offered at Missoula College. 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.

COMX 291 - Special Topics. 1-6 Credits.

(R-6) Offered intermittently. Offered at Missoula College. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

COMX 292 - Independent Study. 1-6 Credits.

(R-6) Offered intermittently. Offered at Missoula College. Course material appropriate to the needs and objectives of the individual student.

COMX 311 - Family Communication. 3 Credits.

Offered yearly. An examination of communication in marriage/romantic partnership, parent-child, and extended family relationships. Topics include intimacy, power, decision-making, problem solving, identity formation, and interpersonal perception.

COMX 312 - Forensics/Honors. 1-3 Credits.

(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 Criticism. 3 Credits.

Offered yearly. Prereq., COMM 111A or consent of instructor. 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, and Environmentalism. 3 Credits.

Offered every other year. Prereq., WRIT 101 or equivalent, and one intermediate writing course. 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.

Gen Ed Attributes: Writing Course-Advanced

COMX 349 - Communication, Consumption, and Climate. 3 Credits.

Offered every other year. Analyzes consumption as a communication practice, investigates discourses that promote consumption, and illuminates environmental impacts on consumption.

COMX 351 - Principles of Public Relations. 3 Credits.

Offered yearly. 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. 3 Credits.

Offered yearly. Writing documents such as press releases, fact sheets, brochures and speeches to create relationships between organizations and their publics.

COMX 380 - Gender and Communication. 3 Credits.

Offered yearly. 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 381 - Gender & Sports. 3 Credits.

Offered yearly. COMX 380 is recommended. This class will examine how gender is communicated in sports. We will examine the role(s) sports play in creating and reinforcing our concepts of gender in a variety of contexts. We will look at such places like the locker room, media's coverage of sports, coaching and coaches, and the players themselves. Additionally, we will examine the actions of fans and the athletes and the roles they play on our understanding of gender. Finally, we will examine issues of race, sexuality, disability, class, and the language of sports to better understand the importance of those issues on gender.

COMX 391 - Special Topics. 1-9 Credits.

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

COMX 398 - Internship. 1-6 Credits.

(R-6) Offered autumn and spring. Preq., 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 CR/NCR only.

COMX 412 - Communication and Conflict. 3 Credits.

Offered autumn and spring. 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 COMX 413 and COMX 412.

COMX 413 - Communication and Conflict-Writing. 3 Credits.

Offered yearly. Prereq., WRIT 101 or equivalent, and one intermediate writing course. 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.

Gen Ed Attributes: Writing Course-Advanced

COMX 414 - Communication in Personal Relationshps. 3 Credits.

Offered yearly. Prereq., WRIT 101 or equivalent, and one intermediate writing course and COMX 115S or consent of instructor. 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.

Gen Ed Attributes: Writing Course-Advanced

COMX 415 - Intercultural Communication. 3 Credits.

Offered autumn and spring. Communication principles and processes in cross-cultural environments. Non-Western cultures are emphasized by contrasting them to Western communication norms.

COMX 421 - Communication in Nonprofit Organizations. 3 Credits.

Offered yearly. Prereq., WRIT 101 or equivalent, and one intermediate writing course. 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.

Gen Ed Attributes: Writing Course-Advanced

COMX 422 - Communication and Technology. 3 Credits.

Offered every other year. Prereq., WRIT 101 or equivalent, and one intermediate writing course. 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.

Gen Ed Attributes: Writing Course-Advanced

COMX 423 - Organizational Communication Consulting and Training. 3 Credits.

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, and Communication. 3 Credits.

Offered every other year. Prereq., WRIT 101 or equivalent, and one intermediate writing course. 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.

Gen Ed Attributes: Writing Course-Advanced

COMX 425 - Communication in Health Organizations. 3 Credits.

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 Theory. 3 Credits.

Offered yearly. Prereq., WRIT 101 or equivalent, and one intermediate writing course. 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.

Gen Ed Attributes: Writing Course-Advanced

COMX 447 - Rhetorical Construction of Women. 3 Credits.

Offered every other year. Prereq., WRIT 101 or equivalent, and one intermediate writing course. 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.

Gen Ed Attributes: Writing Course-Advanced

COMX 449 - Rhetoric of Women's Activism. 3 Credits.

Offered every other year. 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.

COMX 460 - Research Methods. 3 Credits.

Offered autumn and spring. Open only to majors in COMM. Prereq., Grade of C- or better in 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. 1-3 Credits.

(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 480 - Health Communication. 3 Credits.

This course explores key findings in health communication research and practice, focusing on a wide range of media. As a survey course, it provides an overview of the field of health communication with attention to analysis and practice of health communication relationships and messages. It examines the literature and key health communication campaigns, messages and target audiences.

COMX 485 - Communication and Health. 3 Credits.

Offered yearly. Theory and research on the health correlates of human interaction.

COMX 491 - Special Topics. 1-3 Credits.

(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. 1-9 Credits.

(R-9) Offered every term. Prereq., consent of instructor. Offered CR/NCR only.

COMX 493 - Study Abroad/Tours. 1-12 Credits.

COMX 495 - Practicum. 1-9 Credits.

(R-9) Offered intermittently. Prereq., consent of instr. Organized field experience.

COMX 510 - Sem Personal Relationships. 3 Credits.

(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. 3 Credits.

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. 3 Credits.

(R-6) Offered intermittently. A review and discussion of current research regarding conflict in different levels and contexts of communication. Level: Graduate

COMX 515 - Enviro Negotiation Mediation. 3 Credits.

Same as ENST 515, LAW 519 and NRSM 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. 3 Credits.

(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. 3 Credits.

Offered every other year. Instruction in the theories, concepts, principles, and skills employed university level classroom communication and instruction. Level: Graduate

COMX 541 - COMM Teaching Methods. 2 Credits.

(R-8) Offered autumn and spring. Prereq., consent of instr. Restricted to Communication majors only. Offered CR/NCR only. Level: Graduate

COMX 555 - Sem Rhet Crit & Theory. 3 Credits.

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. 3 Credits.

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 575 - Sem:Rhet&Env'l Controversy. 3 Credits.

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 591 - Special Topics. 1-9 Credits.

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

COMX 593 - Professional Paper. 1-3 Credits.

(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

COMX 594 - Topical Seminar. 1-2 Credits.

(R-6) Offered intermittently. Prereq., consent of instr. A review and discussion of current research. Topics vary. Level: Graduate

COMX 595 - Special Topics. 1-9 Credits.

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

COMX 596 - Independent Study. 1-9 Credits.

(R-9) Offered every term. Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student. Level: Graduate

COMX 599 - Thesis. 1-9 Credits.

(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

Communicative Sci & Disorders (CSD)

CSD 109 - SLPeeps: A First Year Guide to CSD. 1 Credit.

Offered autumn for credit/no credit grade mode only. This survey course is designed to present an overview of the CSD major, provide support for graduation success, and inform students about the profession as whole including practicing requirements. Level: Undergraduate

CSD 110 - The Field of CSD. 3 Credits.

Offered autumn. Introduction to the scientific study of human communi-cation 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 191 - Special Topics. 1-6 Credits.

CSD 194 - Seminar. 1-6 Credits.

(R-6) Offered intermittently. A review and discussion of current research. Topics vary.

CSD 205 - Clinical Application and Observations in Speech-Language Pathology and Audiology. 1-2 Credits.

Offered intermittently autumn, spring, or summer. Students will learn roles and responsibilities of being a speech-language pathologist and audiologist HIPAA regulations, and health and safety guidelines. This course is designed as an orientation and observation class in which that will prepare you for your future work in the area of Communicative Disorders.

CSD 210 - Speech & Lang Devel. 3 Credits.

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. 3 Credits.

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.

Gen Ed Attributes: Natural Science Course (N)

CSD 222 - Intro to Audiology. 3 Credits.

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 292 - Independent Study. 1-6 Credits.

(R-6) Offered every term. Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student.

CSD 320 - Phono Devel & Phonetics. 3 Credits.

Offered autumn. Junior standing or higher. 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 331 - Neuroanatomy & Physiology. 3 Credits.

Offered variable semester. 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 linked to class with a focus across the lifespan. Level: Undergraduate

CSD 361 - Introduction to Speech-Language Pathology/Audiology Assistants. 1-3 Credits.

Offered intermittently autumn, spring, or summer. This course is intended to provide the prospective speech-language pathology or audiology assistant (SLP/Audiology-A) with basic information about speech and hearing screening protocols and procedures. The focus of the course is on the role of the SLP/Audiology-A in clinical practice and follows the guidelines and scope of practice for SLPAs established by the American Speech-Language-Hearing Association.

CSD 365 - Acquired Speech and Language Disorders. 3 Credits.

Offered spring. Prereq., CSD 210. 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 392 - Independent Study. 1-6 Credits.

(R-6) Offered every term. Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student.

CSD 396 - Autism on Campus/SvcLrn. 2 Credits.

Prerq., junior or senior Standing, consent of instruct., and application required. This course educates students about autism in adults. The didactic portion addresses executive functioning and social needs. The service learning portion allows direct mentorship to people on campus with autism and related disorders.

CSD 405 - The Clinical Process. 3 Credits.

Offered spring. Prereq., CSD 210, CSD 222, CSD 320, and CSD 365. 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 420 - Speech Science. 3 Credits.

Offered variable semesters. 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 language pathology across the lifespan. Level: Undergraduate

CSD 430 - Senior Capstone. 3 Credits.

Offered autumn. Prereq., WRIT 101 or equivalent, and one intermediate writing course and 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.

Gen Ed Attributes: Writing Course-Advanced

CSD 445 - Autism and Complex Communication Needs. 2-4 Credits.

Offered Intermittently Prereq., CSD 210, CSD 345, senior standing. This course explores and integrates social aspects of communication (e.g., behavioral and social skills affecting communication) and communication accommodations, adaptations, and links to functional and daily-living in individuals with severe to complex communication disorders. This includes a focus on assessment and treatment processes and practices for prevalent diagnoses such as Autism Syndrome Disorder.

CSD 450 - Intro to Aural Rehabilitation. 3 Credits.

Offered spring. Prereq., CSD 210, CSD 222, and CSD 365 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 460 - Language Assessment and Intervention for Children Birth to Preschool. 3 Credits.

Offered intermittently. Prereq., CSD 210 , CSD 320, and senior standing. Students learn language assessment and intervention for children with language delays and disorders from birth to age six including language sampling and analysis procedures, interpreting formal and informal testing, facilitating language through strategies and corresponding theories, planning clinical management and intervention, and enhancing emergent literacy. Level: Undergraduate and Graduate

CSD 461 - Advanced Methods for Speech-Language Pathology/Audiology Assistants. 1-3 Credits.

Offered intermittently autumn, spring, or summer. This course is intended to provide students studying to become speech-language pathology/Audiology Assistants with advanced clinical methodologies associated associated with individuals with a range of communication abilities. The focus of the course is on the advanced role of the SLP/Audiology-Assistants in clinical practice and follows the guidelines and scope of practice for SLP/Audiology-Assistants established by the American Speech-Language-Hearing Association.

CSD 466 - Acq Cogn Comm Disorders. 3 Credits.

Offered intermittently. Prereq., senior standing. 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.

CSD 480 - Multicultural Issues. 3 Credits.

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 - Research. 1-3 Credits.

(R-6) Offered Autumn, Spring. Prereq., consent of the instructor. Participation in independent or instructor associated research activities.

CSD 491 - Special Topics. 1-3 Credits.

(R-6) Offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

CSD 492 - Independent Study. 1-6 Credits.

CSD 495 - Practicum. 1-3 Credits.

(R-5) 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.

CSD 498 - Independent Research. 1-4 Credits.

(R-6) Offered Autumn, Spring. Prereq., consent of the instructor. Participation in independent or instructor associated research activities.

CSD 520 - Artic & Phono Disorders. 3 Credits.

Offered intermittently. Prereq., SLP graduate program standing. Theoretical perspectives on phonological and articulation disorders with emphasis on application to clinical management including evaluation, assessment techniques, and intervention strategies. Level: Graduate

CSD 530 - Voice & Motor Speech Disorders. 4 Credits.

Prereq., SLP graduate standing. 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. 3 Credits.

Prereq., SLP graduate program standing. Theoretical, etiological, and developmental perspectives of fluency disorders. Principals of assessment and intervention, including integration of fluency shaping and stuttering modification techniques across the lifespan. Level: Graduate

CSD 545 - Autism and Complex Communication Needs. 2-4 Credits.

Offered variable terms. Prereq., graduate standing. This course explores and integrates social aspects of communication (e.g., behavioral and social skills affecting communication) and communication accommodations, adaptations, and links to functional and daily-living in individuals with severe to complex communication disorders. This includes a focus on assessment and treatment processes and practices for prevalent diagnoses such as Autism Syndrome Disorder. Level: Graduate

CSD 546 - Alternative Augmentative Communication and Complex Communication Needs II. 1-2 Credits.

Offered intermittently. Prereq., graduate standing. This course explores and integrates communication accommodations, adaptations, and links to functional and daily-living in individuals with severe to complex communication disorders. This includes a focus on assessment and treatment processes and practices for individuals requiring alternative and augmentative communication needs across the lifespan, cultures, and abilities. Level: Graduate

CSD 560 - Language Assessment and Intervention for School-Age Children and Adolescents. 3 Credits.

Prereq., SLP graduate program standing. 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

CSD 565 - Aphasia & Acquired Apraxia of Speech. 3 Credits.

Prereq., SLP graduate program 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. 3 Credits.

Offered intermittently. Prereq., Graduate standing. 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 Processes in Professional Practice I. 1 Credit.

(R-3) Offered Fall, Spring. Prereq., SLP graduate program standing. This course provides content focused on the professional practices, processes, attributes, and abilities associated with professional accountability, ethics, integrity, effective communication skills, clinical reasoning, evidence-based practice, and collaborative practice. In addition clinical consideration of multicultural aspects of communication are considered of clients from all ages, backgrounds, and abilities. Links to clinical application in associated applied classes (CSD 571) are made. Level: Graduate

CSD 571 - Foundational Applied Clinic in Service Learning. 1-3 Credits.

(R-9) Offered autumn, spring, and summer; on campus only. Prereq., SLP graduate program standing or permission of Director of Clinical Education. Foundational Application of professional skills in the UM DeWit RiteCare Clinic. Assignment of cases and area of specialization will vary with clinical educator assignment. Level: Graduate

CSD 575 - Advanced Clinical Processes in Professional Practice II. 1-3 Credits.

(R-18) Offered fall term. Prereq., CSD 570. This course provides content focused on continued development of topics related to professional development as a speech-language pathologist and will support the clinical externship experience. Emphasis on professional practices and processes, ASHA and state compliance, clinical problem solving, evidence based practice, employment settings considerations, self-advocacy, communication, and multicultural considerations. Level: Graduate

CSD 576 - Advanced Applied Clinic II. 1-9 Credits.

(R-18) Offered autumn, spring, summer. Prereq., CSD 570., coreq. 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.

CSD 580 - Diagnostics. 3 Credits.

Offered Fall. Prereq., Graduate Standing. 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 591 - Special Topics. 1-6 Credits.

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

CSD 592 - Independent Study. 1-6 Credits.

(R-6) Offered intermittently. Course material appropriate to the needs and objectives of the individual student. Level: Graduate

CSD 594 - Graduate Seminar. 1-12 Credits.

(R-3) Offered intermittently. Prereq., consent of instr. A review and discussion of current research. Topics vary.

CSD 595 - Practicum. 1-12 Credits.

Offered intermittently. Prereq., consent of instr. Level: Graduate

CSD 600 - Research Methods. 3 Credits.

Offered spring. Prereq., SLP graduate program 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 640 - Swallowing Disorders. 3 Credits.

Prereq., SLP graduate program standing. Study of anatomy, physiology, and pathology of swallowing. Diagnosis and treatment of swallowing disorders. Level: Graduate

CSD 675 - Clinical Externship/ Advanced Practicum. 1-12 Credits.

(R-12) Offered every term. Prereq., permissions of Clinic Extern Coordinator and completion of CSD 570, CSD 575 coursework and clinical practicum CSD 571 and CSD 576 with a total of 200 clinical clock hours or more. The course is an externship completed during a student?s final semester of graduate school requiring 30-40 hours a week participation. Out of state placements approved by the clinical externship coordinator. Level: Graduate

CSD 688 - Masters Science Capstone Portfolio. 3 Credits.

Offered spring and autumn. Prereq., CSD 600. An integration evidence-based practice foundations in Speech-Language Pathology. This course requires comprehensive portfolios that include a best-evidence systematic literature review, a clinical philosophy reflecting current learning theory, and evidence of application of current best practices. Level: Graduate

CSD 691 - Special Topics. 1-5 Credits.

(R-6) Offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. Level: Graduate

CSD 692 - Independent Study. 1-6 Credits.

(R-6) Offered intermittently. Course material appropriate to the needs and objectives of the individual student. Level: Graduate

CSD 694 - Grad Seminar. 1-12 Credits.

(R 6) Offered intermittently. Prereq., graduate standing. Level: Graduate

CSD 695 - Practicum. 1-3 Credits.

Offered intermittently. Prereq., consent of instr. Level: Graduate

CSD 699 - Thesis. 1-6 Credits.

(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

Community Health (CHTH) < University of Montana

Community Health (CHTH)

CHTH 292 - Independent Study. 1-6 Credits.

(R-6) Offered every term. Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual studen

CHTH 355 - Theory Practicum Community Health Education. 3 Credits.

Offered autumn. Prereq., KIN 205. History, philosophy, and theory related to community health education and health promotion. Includes the application of program development principles and health promotion strategies to community health programs.

CHTH 445 - Program Planning in Community Health. 4 Credits.

Offered spring. Prereq., CHTH 355. Overview of the issues, approaches, and techniques community health educators and professionals utilize in planning and implementing programs to assist communities in improving health status and reducing risky behaviors and their determinants. This course co-convenes with HHP 541.

CHTH 485 - Theories of Health Behaviors and Counseling. 3 Credits.

Offered spring. Exploration of the helping role as it relates to health behavior, health assessment, problem-solving and referral skills. Application of theories to facilitation of healthy behavior changes.

CHTH 490 - Undergraduate Research. 1-3 Credits.

(R-6) Offered every term. Prereq., consent of instr. Directed individual research and study appropriate to the back ground and objectives of the student.

CHTH 491 - Special Topics. 1-6 Credits.

(R-6) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. Level: Undergraduate-Graduate

CHTH 492 - Independent Study. 1-3 Credits.

(R-6) Offered every term. Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student.

CHTH 494 - Seminar. 1-6 Credits.

(R-6) Prereq., consent of instr. Offered intermittently. A review and discussion of current research. Topics vary.

CHTH 498 - Internship. 1-6 Credits.

(R-6) Offered every term. Prereq. all HHP options minimum junior standing and ECP 120/121 (or equivalent). Prereqs per option. Exercise Science Applied: KIN 320/321. If internship is coaching or strength & conditioning must also have completed KIN 410 and COA 405. Exercise Science Pre-Professional: KIN 320/321. If internship is cardiac rehab must also have completed KIN 460/483/484. Community Health: CHTH 355. Supervised field experiences with private businesses, public agencies, or institutions. 45 hours of internship site work = 1 credit. A maximum of 6 credits of Internship 498 may count toward graduation. Students should not be registered for more than 14 credits their internship semester.

CHTH 591 - Special Topics. 1-6 Credits.

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

Computer Applications (CAPP)

CAPP 091 - Special Topics. 1-6 Credits.

(R-6) Offered intermittently. Offered at Missoula College. 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. 3 Credits.

Offered autumn and spring. Offered at Missoula College. 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. 3 Credits.

Offered autumn and spring. Offered at Missoula College. 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. 3 Credits.

Offered autumn and spring. Offered at Missoula College. Prereq., CAPP 120. Emphasis on the use of the spreadsheet, graphics, and databases to solve quantitative business problems. Includes projects relating to data and graphs/charts.

CAPP 171 - Communicating via Computers. 3.000 Credits.

Offered intermittently. 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.

CAPP 254 - Advanced MS Word. 3 Credits.

Offered spring. Offered at Missoula College. Prereq., CAPP 154 or consent of instructor. Analysis of the concepts of advanced work processing document production underlying mastery of the software. Business-related application projects utilizing critical thinking are included. A speed and timing component to increase skills essential for employment will be a portion of this course.

CAPP 292 - Independent Study. 1-6 Credits.

Offered at Missoula College. Course material appropriate to the needs and objectives of the individual student.

Computer Science/Programming (CSCI) < University of Montana

Computer Science/Programming (CSCI)

CSCI 100 - Intro to Programming. 3.000 Credits.

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 105 - Computer Fluency. 3.000 Credits.

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. 1 Credit.

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 107 - The Joy and Beauty of Computing. 3 Credits.

Examines the computing field and how it impacts the human condition. Introduces exciting ideas and influential people. Provides a gentle introduction to computational thinking using the Python programming language.

CSCI 108 - Interdisciplinary Computing: Practical Computational Problem Solving. 3 Credits.

Offered autumn and spring. Prereq., WRIT 101 (or higher) or equivalent. Students will develop critical thinking and problem solving by applying computational problem solving across a broad range of interdisciplinary fields. This course is not a programming course. Instead, students will focus on problem specification, meta-analysis, formal description, generalizing solutions, enumerating decision possibilities and outcomes, process analysis, problem partitioning, and digital representation using the English language.

Gen Ed Attributes: Writing Course-Intermediate

CSCI 113 - Programming with C++ I. 3 Credits.

Offered spring. Offered at Missoula College. M 090 or ALEKS score >= or M01-Maplesoft Arithmetic score >= 9 recommended prior to taking course. Object oriented programming using C++. Implementation of structured programming concepts along with construction of classes to create data types for defining objects.

CSCI 125 - Computation in the Sciences. 3.000 Credits.

Offered autumn at the Mountain Campus. Use a high-level structured programming language to study data types, looping and control structures, lists, dictionaries, and file i/o. Use computing and programming to solve scientific problems.

CSCI 126 - Computation in the Sciences with Calculus. 3.000 Credits.

Offered autumn. Prereq., basic computer and spreadsheet literacy; coreq., M 162 or M 171. An introduction to programming in Python with an emphasis on problems arising in the sciences, including: function plotting, data fitting, file input/output, numerical differentiation and integration, solving ordinary differential equations, matrix manipulation, and sensor networks.

CSCI 135 - Fund of Computer Science I. 3.000 Credits.

Offered autumn and spring. Offered on both Mountain Campus and at Missoula College. Prereq., computer programming experience in a language such as BASIC, Pascal, C, etc. Fundamental computer science concepts using a high level structured programming language (e.g. Java or Python).

CSCI 136 - Fund of Computer Science II. 3.000 Credits.

Offered autumn and spring. Offered at both Mountain Campus and Missoula College. Prereq., CSCI 125, or CSCI 126 or CSCI 135; coreq., M 115 or M 151 or consent of instr. 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. 3.000 Credits.

Offered autumn and spring. Offered at both Mountain Campus and at Missoula College. Problem solving and data modeling using computer productivity software. Emphasis using spreadsheets and database for data analysis.

CSCI 181 - Web Design and Programming. 3 Credits.

Offered autumn. Students will learn how to critically analyze the usability of web sites and create their own by understanding and applying universal principles of design. Programming and other key concepts covered include HTML, CSS, JavaScript, and Web Graphics. Students will complete many different types of Web projects throughout the semester, culminating in an online portfolio used to showcase work completed in this class and others. No prior programming experience is expected.

CSCI 191 - Special Topics. 6.000 Credits.

(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.

CSCI 198 - Internship. 1-6 Credits.

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.

CSCI 205 - Programming with C/C++. 3 Credits.

Offered spring and fall. Prereq., CSCI 136. 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 memory allocation and de-allocation, type-checking, scope, polymorphism, inheritance.

CSCI 215E - Social & Ethical Issues in CS. 3 Credits.

Offered autumn and spring. Offered at Missoula College. Prereq., WRIT 101 (or higher) or equivalent. Exploration of ethical issues in the field of computing. Skills needed to identify and analyze various ethical concerns. Standard ethical concepts and theories, methods of ethical analysis. Strong emphasis on practical application of the ethical process.

Gen Ed Attributes: Ethical & Human Values Course, Writing Course-Intermediate

CSCI 221 - System Analysis and Design. 3 Credits.

Offered spring. Offered at Missoula College. Analysis of the system development life cycle. Emphasis on planning, analyzing, designing, implementing and supporting information systems to meet business requirements. Covers feasibility studies, time and cost estimates, modeling tools, design tools, implementation and support strategies. A simulated business design project will be developed.

CSCI 232 - Data Structures and Algorithms. 4.000 Credits.

Offered autumn. Prereq., 'B-' or better in CSCI 136; or consent of instr. Abstract data types, algorithm analysis, stacks, queues, lists, recursion, trees, hashing, graphs, and applications of data structures in algorithm development. Python programming language used.

CSCI 240 - Databases and SQL. 3 Credits.

Offered autumn. Relational database design including: requirements analysis, data structure, entity relationships, normalization, relational algebra and integrity. Physical implementation focusing on data storage; retrieval and modification; concurrency; optimization; security; SQL; and XML.

CSCI 290 - Undergraduate Research. 1-6 Credits.

(R-10) Offered every term. Offered at Missoula College. Consent of instr. Independent research under the direction of a faculty member.

CSCI 291 - Special Topics. 1-6 Credits.

(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.

CSCI 298 - Internship. 1-6 Credits.

(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.

CSCI 315E - Computers, Ethics, and Society. 3 Credits.

Offered autumn. Prereq., WRIT 101 or equivalent, and one intermediate writing course. Ethical problems that computer scientists face. The codes of ethics of professional computing societies. The social implications of computers, computing, and other digital technologies.

Gen Ed Attributes: Ethical & Human Values Course, Writing Course-Advanced

CSCI 323 - Software Science. 3 Credits.

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. 3 Credits.

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. 3 Credits.

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. 3 Credits.

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. 1-6 Credits.

(R-6) Offered intermittently. Prereq., consent of instr. Directed individual research and study appropriate to the back ground and objectives of the student.

CSCI 391 - Special Topics. 1-6 Credits.

(R-12) 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. 1-6 Credits.

(R-6) Offered intermittently. Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student.

CSCI 394 - Seminar. 1-6 Credits.

(R-6) Offered intermittently. Prereq., consent of instr. Guidance in special work.

CSCI 398 - Internship. 1-3 Credits.

(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.

CSCI 410 - Advanced Client-side Web Programming. 3 Credits.

Offered intermittently. Prereq., CSCI 136. Programming and software development techniques for developing client side web-based applications. Scripting and other programming languages that are used for client-side web-based development.

CSCI 411 - Advanced Web Programming. 3 Credits.

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. 3 Credits.

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 Prgrmng Theory/Practice I. 3 Credits.

Offered autumn. Prereq., CSCI 323, or consent of instr. Students should be of Senior class standing. Class represents first in senior capstone experience. Students will work in groups to design and prototype real-world software. Focus will be on client interaction, software engineering methodologies, project management tools, requirements specification and analysis, design, user feedback, documentation and presentation.

CSCI 427 - Adv Prgrmng Theory/Practice II. 3 Credits.

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 441 - Computer Graphics Programming. 3 Credits.

Offered intermittently. Prereq., CSCI 232 and M 221 or consent of instr. The graphics pipeline, its implementation in hardware and emphasis on the programmable portions of the pipeline. Matrix transformations for modeling, viewing, clipping, and windowing. Application of lighting, coloring, and texturing models. Hierarchical modeling of objects. Programmable shaders. OpenGL and WebGL.

CSCI 442 - Computer Vision. 3 Credits.

Offered intermittently. Prereq., M 221 and CSCI 232, or consent of instructor. Introducing how digital images can be used for quantitative analysis and in artifical intelligence. Topics include the fundamentals of image formation and optics, the geometry of images, feature detection and matching, stereo vision and photogrammetry, tracking, and object detection and classification. Course co-convenes with CSCI 552. Credit not allowed for both CSCI 442 and CSCI 552.

CSCI 443 - User Interface Design. 3 Credits.

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.

CSCI 444 - Data Visualization. 3 Credits.

Offered intermittently. Prereq., M 171; programming experience; and junior, senior, or graduate status; or consent of instr. This course emphasizes the practice of data visualization, compelling students to identify and master tools to produce visualizations of data having relational, raster, vector, geographical, networked, mesh based, spectral, or phase space properties. The unique challenges of each data type will be covered. The emphasis on production is coupled to a framework for critique, allowing students to differentiate between high and low qualities visualizations.

CSCI 446 - Artificial Intelligence. 3 Credits.

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. 3 Credits.

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.

CSCI 448 - Pattern Recognition. 3 Credits.

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.

CSCI 451 - Computational Biology. 3 Credits.

Offered Autumn. Designed for attendance by both computer scientists and biologists. The course will explore the interdisciplinary nature at the juncture of the two fields. Students will be introduced to bioinformatics (emphasis: computational genomics), with exposure to fundamental problems, algorithms, and tools in the field. This includes a basic introduction to genomics, along with in-depth coverage of algorithms and methods relevant to modern computational genomics, including: biological sequence alignment, sequence database homology search, and phylogeny inference. The programming expectations are limited for a 400-level computer science course, but at least one semester of a programming-intensive course is required. Credit not allowed for CSCI 558 and this course

CSCI 460 - Operating Systems. 3 Credits.

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. 3 Credits.

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.

CSCI 466 - Networks. 3 Credits.

Offered spring. Prereq., CSCI 232. Concepts and practice of computer networking, network protocol layers, switching, routing, flow, and congestion control. Network programming.

CSCI 477 - Simulation. 3 Credits.

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.

CSCI 480 - Applied Parallel Computing Techniques. 3 Credits.

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.

CSCI 490 - Research. 1-6 Credits.

(R-6) Offered intermittently. Prereq., consent of instr. Directed individual research and study appropriate to the back ground and objectives of the student.

CSCI 491 - Special Topics. 1-6 Credits.

(R-18) 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. 1-6 Credits.

(R-6) Offered intermittently. Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student.

CSCI 494 - Seminar. 1-6 Credits.

(R-6) Offered intermittently. Prereq., consent of instr. Guidance in special work.

CSCI 498 - Internship. 1-3 Credits.

(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.

CSCI 499 - Senior Thesis/Capstone. 1-6 Credits.

(R-6) Offered every term. Prereq., WRIT 101 or equivalent, and one intermediate writing course and consent of thesis/project director and chair of the Computer Science Department. Senior thesis for computer science majors and/or Watkins scholars.

Gen Ed Attributes: Writing Course-Advanced

CSCI 501 - Graduate Research Methods. 3 Credits.

Offered autumn. Prereq., Non-probationary graduate status. Development of the skills required for effective research in Computer Science, including literature review, research proposal development, oral and visual presentation techniques. Included is mandatory attendance of a colloquium featuring presentations from UM faculty and students as well as external researchers from academics and industry. Level: Graduate

CSCI 510 - Advanced Client-side Web Programming. 3 Credits.

Offered intermittently. Prereq., CSCI 136. Programming and software development techniques for developing client side web-based applications. Scripting and other programming languages that are used for client-side web-based development. Level: Graduate

CSCI 543 - Human-Computer Interaction. 3 Credits.

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

CSCI 547 - Machine Learning. 3 Credits.

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

CSCI 548 - Pattern Recognition. 3 Credits.

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

CSCI 552 - Computer Vision. 3 Credits.

Offered intermittently. Prereq., M 221 and CSCI 232, or consent of instructor. Introducing how digital images can be used for quantitative analysis and in artifical intelligence. Topics include the fundamentals of image formation and optics, the geometry of images, feature detection and matching, stereo vision and photogrammetry, tracking, and object detection and classification. Course co-convenes with CSCI 442. Credit not allowed for both CSCI 442 and CSCI 552. Level: Graduate.

CSCI 555 - Topics Artificial Intelligence. 3 Credits.

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. 3 Credits.

Offered autumn. Designed for attendance by both computer scientists and biologists. The course will explore the interdisciplinary nature at the juncture of the two fields. Students will be introduced to bioinformatics (emphasis: computational genomics), with exposure to fundamental problems, algorithms, and tools in the field. This includes a basic introduction to genomics, along with in-depth coverage of algorithms and methods relevant to modern computational genomics, including: biological sequence alignment, sequence database homology search, and phylogeny inference. The programming expectations are limited for a 500-level computer science course, but at least one semester of a programming-intensive course is required. A substantial project is a key component of the course. Level:

CSCI 564 - Applications of Mining Big Data. 3 Credits.

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

CSCI 577 - Simulation Modeling. 3 Credits.

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

CSCI 580 - Applied Parallel Computing Techniques. 3 Credits.

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

CSCI 590 - Research. 1-6 Credits.

(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 591 - Special Topics. 1-6 Credits.

(R-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

CSCI 592 - Independent Study. 1-6 Credits.

(R-6) Offered intermittently. Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student. Level: Graduate

CSCI 594 - Graduate Seminar. 1-6 Credits.

(R-6) Offered intermittently. Prereq., consent of instr. Seminar on current research topics in computer science. Level: Graduate

CSCI 595 - Practicum. 1-6 Credits.

(R-12) Offered intermittently. Prereq., consent of instr. Organized field experience.

CSCI 598 - Internship. 1-9 Credits.

(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

CSCI 599 - Thesis/Project. 1-6 Credits.

(R-6) Offered every term. Prereq., consent of instr. Research for and preparation of the master thesis or professional paper. Level: Graduate

Construction Trades (CSTN) < University of Montana

Construction Trades (CSTN)

CSTN 120 - Carpentry Bscs & Rough-In Frmg. 5 Credits.

Offered autumn. Offered at Missoula College. 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 now to install windows and an exterior door.

CSTN 122 - Beginning Carpentry Lab. 5 Credits.

Offered at Missoula College. Lab to support CSTN 120.

CSTN 142 - Int & Ext Finish Carpentry. 4 Credits.

Offered spring. Offered at Missoula College. 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. 4 Credits.

Offered at Missoula College. Lab to accompany CSTN 142. Prereq., CSTN 120 and CSTN 122.

CSTN 171 - Site Prep, Found, Concrete Ins. 3 Credits.

Offered autumn. Offered at Missoula College. 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. 1-6 Credits.

(R-6) Offered intermittently. Offered at Missoula College. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

CSTN 192 - Independent Study. 1-6 Credits.

(R-6) Offered intermittently. Offered at Missoula College. Course material appropriate to the needs and objectives of the individual student.

CSTN 205 - Advanced Carpentry Lecture. 6 Credits.

Offered spring. Offered at Missoula College. Prereq., 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.

CSTN 206 - Advanced Carpentry Lab. 2 Credits.

Offered at Missoula College. Laboratory to accompany CSTN 205. Prereq., 120, 122, 142, and 143.

CSTN 261 - Building Management. 4 Credits.

Offered autumn. Offered at Missoula College. 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. 6 Credits.

Offered spring. Offered at Missoula College. Prereq., 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. 4 Credits.

Offered autumn. Offered at Missoula College. Prereq., CSTN 120, 122, 142, 143, and 171. 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. 4 Credits.

Offered autumn. Offered at Missoula College. 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. 3 Credits.

Offered spring. Offered at Missoula College. Prereq., CSTN 282. 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 286 - Advanced Wood Buildings. 3 Credits.

Offered spring. Offered at Missoula College. Curriculum will provide current and future industry participants education in the history, benefits, sourcing, design, products, applications and techniques in modern and emerging wood and wood frame construction. It will further showcase the inherent qualities of responsibly sourced wood as a rapidly renewable resource in single family residential, low rise multifamily, mixed use commercial and high rise buildings and inform both current practitioners and future industry workforce members on the products, techniques and tools in wood building construction that provide the maximum economic and sustainable benefits.

CSTN 291 - Special Topics. 3-6 Credits.

(R-6) Offered at Missoula College. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

CSTN 295 - Practicum. 1-3 Credits.

(R-3) Offered spring. Offered at Missoula College. The course will be an elective for all students within the Sustainable Construction Technology Program and a requirement for any student pursuing a CTS in Green Building. The practicum will allow students to apply concepts learned in CSTN 282 Green Building and Design I, CSTN 283 Green Building and Design II, and CSTN 261 Building Management in a hands on project, research activity or other relevant designated undertaking.

CSTN 298 - SCT Internship. 1-6 Credits.

(R-6) Offered at Missoula College. Extended classroom experience which provides practical application of classroom learning. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation.

CSTN 299 - Capstone: Carpentry. 2 Credits.

Offered autumn. Offered at Missoula College. Capstone laboratory to accompany CSTN 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.

Counselor Education (COUN)

COUN 195 - Career Development. 1-6 Credits.

COUN 242S - Intimate Relationships. 3 Credits.

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.

Gen Ed Attributes: Social Sciences Course (S)

COUN 390 - Supervised Research. 1-3 Credits.

COUN 395 - Special Topics. 1-9 Credits.

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

COUN 475 - Forgiveness & Reconcilia. 3 Credits.

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. 3 Credits.

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. 1-9 Credits.

(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. 1 Credit.

Course is designed to prepare school and mental health counselors-in-training to 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. 3 Credits.

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. 3 Credits.

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. 3 Credits.

Offered spring. Prereq., COUN 511. Theories, approaches, and methods for group counseling and guidance. Level: Graduate

COUN 530 - Applied Counseling Skills. 3 Credits.

Offered autumn and spring. Prereq., COUN 511, COUN 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. 3 Credits.

Offered fall. Prereq., undergraduate statistics course or consent of instructor. 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 545 - Counseling Res & Prog Eval. 3 Credits.

This course provides an overview and analysis of quantitative and qualitative research approaches used within the professional counseling discipline. A focus on understanding key research concepts (e.g., internal validity, external validity) within the context of contemporary research publications in counseling is emphasized. Level: Graduate

COUN 550 - Intro Family Counseling. 3 Credits.

Offered spring. 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. 3 Credits.

Offered summer only. 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 - School Coun, Prog Dev, & Superv. 3 Credits.

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. 3 Credits.

Offered 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. 3 Credits.

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. 3 Credits.

Offered summer only. 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 585 - Coun Meth: School & Agency. 1-9 Credits.

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. 1 Credit.

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 and written examination covering the eight CACREP core areas of counseling. Level: Graduate

COUN 594 - Seminar. 1-9 Credits.

(R-9) Offered intermittently. Prereq., consent of instr. Group analysis of problems in specific areas of professional counseling. Level: Graduate

COUN 595 - Special Topics. 1-9 Credits.

(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. 1-6 Credits.

(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. 1-9 Credits.

(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. 3 Credits.

Offered fall. 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. 3 Credits.

Offered spring. Prereq., COUN 512. Overview of diagnosis, treatment planning and case documentation in counseling. Level: Graduate

COUN 620 - Advanced Counseling Theories. 3 Credits.

Offered every other spring. Prereq., COUN 511. This course provides an overview and analysis of evidence based treatments in counseling. There is a focus on cognitive-behavioral treatments for specific disorders as well as acceptance and commitment therapy and principles of evidence-based relationships. Practical application of these approaches is emphasized. Level: Graduate

COUN 625 - Intro Mental Health Systems. 3 Credits.

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 630 - Doctoral Clinical Practice. 3 Credits.

Doctoral level clinical experience of 100 supervised hours focusing on the counseling relationship, including case conceptualization and therapeutic skills from a variety of theoretical perspectives. Additional areas of focus are ethical considerations and the assessment of professional counseling outcomes. Level: Graduate

COUN 635 - Clinical Supervision Practice. 3 Credits.

Offered every other fall. Introduction to clinical supervision. Includes professional supervision standards, theory, modalities, settings, ethical and legal issues. Course includes supervision of doctoral student supervision experiences.

COUN 640 - Professional Leadership and Scholarly Development. 3 Credits.

Offered every other spring. Theories of academic leadership, within professional trends, political and social contexts. Includes developing awareness of scholarly opportunities, including preparation of a professional counseling organization conference proposal. Level: Graduate

COUN 650 - Pedagogy and the Professorate. 3 Credits.

Offered every other spring. Consideration of pedagogy including teaching, learning, governance, curriculum development, assessment and evaluation. Includes knowledge of accreditation processes, personal and professional challenges of faculty life and exploration of doctoral level career paths. Level: Graduate

COUN 670 - Doc Comprehensive Exam. 2 Credits.

Offered every semester. Students will successfully complete four doctoral Comprehensive Examination Essays read by all members of the student's Doctoral Comps Committee. At least one of the essays is to be submitted for publication. Level: Graduate

COUN 685 - Methods in Counselor Education and Professional Counseling. 1-9 Credits.

(R-18) Offered every semester. Supervised advanced counselor education methods and approaches that address the professional leadership roles of counselor education, including realms of teaching and advising, clinical supervision, scholarly work and professional counseling practice. Level: Graduate

COUN 695 - Special Topics. 1-9 Credits.

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

COUN 699 - Thesis/Dissertation. 1-9 Credits.

(R-10) Offered every semester. Prereq., EDLD 620 or 625. Preparation of a dissertation, thesis, professional paper, or manuscript based on research for presentation and/or publication. Credit/No Credit grading only. Level: Graduate

Creative Pulse (CP) < University of Montana

Creative Pulse (CP)

CP 582 - Arts Educ Seminar I. 1-2 Credits.

(R-4) Same as MUSE 582. Offered summers. Topics vary. Level: Graduate

CP 583 - Arts Educ Seminar II. 1-2 Credits.

(R-4) Prereq., CP 582. Same as MUSE 583. Continuation of CP 582. Level: Graduate

CP 584 - Grad/Res Studio Pr:Photo. 1-2 Credits.

(R-4) Offered summer. Prereq., CP 583. Same as MUSE 584. Continuation of CP 583. Level: Graduate

CP 585 - Arts Educ Seminar IV. 1-2 Credits.

(R-4) Prereq., CP 584. Same as MUSE 585. Continuation of CP 584. Level: Graduate

CP 587 - Arts Educ Practicum. 2 Credits.

(R-8) Continuation and synthesis of preceding seminars. Level: Graduate

CP 588 - Creative Pulse Apprenticeship. 1-3 Credits.

(R-24) Offered summer. Same as MUSE 588. Exploration of art forms to develop new artistic and communicative perceptions and awareness. Level: Graduate

CP 589 - Arts Educ Field Project. 1 Credit.

(R-4) Offered summer. Creative/research activities. Level: Graduate

CP 596 - Independent Study. 1-6 Credits.

(R-24) Offered autumn and spring. Prereq., consent of instr. Level: Graduate

CP 597 - Research. 1-6 Credits.

(R-24) Offered autumn and spring. Prereq., consent of instr. Level: Graduate

CP 599 - Professional Paper. 1-4 Credits.

(R-4) Offered autumn and spring. Preparation of a professional paper appropriate to the needs and objectives of the individual student. Level: Graduate

Creative Writing (CRWR)

CRWR 115L - Montana Writers Live. 3 Credits.

(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.

Gen Ed Attributes: Lit & Artistic Studies (L)

CRWR 191 - Special Topics. 1-6 Credits.

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

CRWR 210A - Intro Fiction Workshop. 3 Credits.

Offered intermittently. Offered on Mountain Campus and at Missoula College. 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.

Gen Ed Attributes: Expressive Arts Course (A)

CRWR 211A - Intro Poetry Workshop. 3 Credits.

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.

Gen Ed Attributes: Expressive Arts Course (A)

CRWR 212A - Intro Nonfiction Workshop. 3 Credits.

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.

Gen Ed Attributes: Expressive Arts Course (A)

CRWR 234 - The Oval: Literary Mag. 3 Credits.

(R-6) Offered Spring, Mountain Campus. 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 240A - Intro Creative Writing Wrkshp. 3 Credits.

Offered intermittently. Offered at Missoula College. 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.

Gen Ed Attributes: Expressive Arts Course (A)

CRWR 291 - Special Topics. 1-6 Credits.

(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. 3 Credits.

(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.

CRWR 311 - Intermediate Poetry Workshop. 3 Credits.

(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.

CRWR 312A - Intermediate Nonfiction Workshop. 3 Credits.

(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.

Gen Ed Attributes: Expressive Arts Course (A)

CRWR 320 - The Art and Craft of Revision. 3 Credits.

(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 391 - Special Topics. 1-9 Credits.

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

CRWR 392 - Independent Study. 1-3 Credits.

CRWR 398 - Internship. 1-3 Credits.

(R-9) Offered intermittently. Prereq., consent of faculty supervisor, department chair, and the Internship Services Office.

CRWR 410 - Advanced Fiction Workshop. 2-3 Credits.

(R-6) Offered autumn and spring. Prereq., junior standing and CRWR 310. An advanced writing workshop in which student manuscripts are read and critiqued. Rewriting of work already begun (in CRWR 310 classes) will be encouraged.

CRWR 411 - Advanced Poetry Workshop. 2-3 Credits.

(R-6) Offered autumn and spring. Prereq., junior standing and CRWR 311. 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.

CRWR 412 - Advanced Nonfiction Workshop. 3 Credits.

(R-6) Offered autumn and spring. Prereq., junior standing and CRWR 312A. 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.

CRWR 424 - Creative Writing: Nonfiction, New West: From This Point. 3 Credits.

Offered spring. Nonfiction writing course offered in partnership with the New West Certificate Program. Participants will explore and choose an exact geographical point from which to formulate and develop a question at issue. Working individually and collaboratively, writers will conduct field, primary, and secondary research and draft, revise, and edit an original work focused on natural and human history and incorporating physical and cultural geography.

CRWR 425 - Storytelling. 3 Credits.

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. 1-6 Credits.

(R-6) Offered Intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

CRWR 492 - Independent Study. 1-3 Credits.

(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.

CRWR 496 - Service Learning. 1-3 Credits.

(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.

CRWR 510 - Fiction Workshop. 1-15 Credits.

(R-15) Offered autumn and spring. Prereq., consent of instr. Level: Graduate

CRWR 511 - Poetry Workshop. 1-15 Credits.

(R-15) Offered autumn and spring. Prereq., consent of instr. Level: Graduate

CRWR 512 - Nonfiction Workshop. 1-15 Credits.

(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

CRWR 513 - Techniques of Nonfiction. 1-6 Credits.

(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 of Modern Fiction. 1-6 Credits.

(R-6) Offered intermittently. Prereq., consent of instr. Intensive reading of contemporary prose writers. Level: Graduate

CRWR 515 - Traditional Prosody. 3 Credits.

Offered intermittently. Prereq., consent of instr. Intensive practice and readings in prosodic and other poetic techniques. Level: Graduate

CRWR 516 - Topics in Creative Writing. 3 Credits.

(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

CRWR 595 - Special Topics. 1-9 Credits.

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

CRWR 596 - Graduate Independent Study. 1-9 Credits.

(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

CRWR 598 - Internship. 1-6 Credits.

(R-6) Offered intermittently. Prereq., consent of faculty supervisor, department chair, and the Internship Services Office. Level: Gradaute

CRWR 599 - Thesis. 1-12 Credits.

(R-12) Offered every term. Preparation of a thesis or manuscript based on research for presentation and/or publication. Level: Graduate

Criminal Justice (CJUS) < University of Montana

Criminal Justice (CJUS)

CJUS 125N - Fund of Forensic Science. 3 Credits.

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.

Gen Ed Attributes: Natural Science Course (N)

CJUS 488 - Forensic Science the Crime Lab and Beyond. 3 Credits.

Offered spring and online in autumn. Examination of the forensic sciences with emphases on the non-crime lab forensic sciences, new technologies, and new directions in the forensic sciences.

Culinary Arts (CULA)

CULA 100 - Culinary Arts Fundamentals. 1 Credit.

Offered every term. Offered at Missoula College. The class will explain culinary workforce expectations, certification and advancement opportunities, degree and certificate requirements, basics of culinary math, recipe writing, safety/sanitation, and mise en place. In addition, students will be coached through uniform and supply requirements and kitchen expectations. The class is CR/NCR grading only.

CULA 101 - Introduction to Food Service. 5 Credits.

Prerequisites: CULA 100. Offered autumn and summer. Offered at Missoula College. Introduction to fundamentals in food handling practice, history, cooking methods, tool and equipment skills, safety and sanitation, recipe and menu development. For students interested in entering food service/hospitality industry.

CULA 105 - Food Service Sanitation. 2 Credits.

Offered autumn and summer. Offered at Missoula College. Introduction to fundamentals in safe and sanitary food handling practices. Emphasis on development of a well-designed food safety program centered on Hazard Analysis Critical Control Point (HACCP).

CULA 156 - Dining Room Procedures. 3 Credits.

Offered every term. Offered at Missoula College. Prereq., CULA 101 and CULA 105 or consent of instructor. 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 & Garde Manger. 3 Credits.

Offered autumn and spring. Offered at Missoula College. Prereq., CULA 101 and CULA 105 or consent of instructor. 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 entree salads, cold sauces, appetizers, finger sandwiches, pates, gelatins, mousses, ice carvings, as well as banquet and buffet presentation.

CULA 158 - Short Order Cookery. 4 Credits.

Offered every term. Offered at Missoula College. Prereq., CULA 101 and CULA 105 or consent of instructor. Hands-on experience in all facets of short order cookery. Emphasis on coordination, speed, presentation, and basic food preparation as well as cooking methods.

CULA 160 - Soups, Stocks, & Sauces. 3 Credits.

Offered every term. Offered at Missoula College. Prereq., CULA 101 and CULA 105 or consent of instructor. Hands-on preparation of basic soups, stocks, sauces, glazes, thickening agents, and garnishes.

CULA 161 - Meats & Vegetables. 3 Credits.

Offered every term. Offered at Missoula College. Prereq., CULA 101 and CULA 105 or consent of instructor. Hands-on experience with the fundamental cooking methods for meats, vegetables, grains, legumes, and pastas.

CULA 165 - Baking & Pastry. 3 Credits.

Offered every term. Offered at Missoula College. Prereq., CULA 101, CULA 105 or consent of instructor. 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.

CULA 191 - Special Topics. 1-6 Credits.

(R-6) Offered intermittently. Offered at Missoula College. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

CULA 192 - Independent Study. 1-6 Credits.

(R-6) Offered intermittently. Offered at Missoula College. Course material appropriate to the needs and objectives of the individual student.

CULA 198 - Internship. 1-6 Credits.

Introduction to foundations of dining room service and protocol. Includes techniques in dining room service. Personal hygiene, applied math, basic culinary terminology, beverage management, and table side cooking methods are practiced.

CULA 205 - Catering Mangement. 2 Credits.

Offered autumn and spring. Offered at Missoula College. Prereq., CULA 101 and 105 or consent of instructor. This course will introduce the student to a comprehensive look at planning, starting and operating a successful catering business. Whether on-premise, off-premise, mobile, inside a hotel, part of a restaurant or run from a home kitchen, the student will learn the necessary skills from competence in cooking to managerial skills.

CULA 210 - Nutritional Cooking. 3 Credits.

Offered spring. Offered at Missoula College. Prereq., CULA 101 and CULA 105 or consent of instructor. Principles of healthy and nutritious culinary procedures. Adjustment of classic methods to suit preparations designed to extend variety on "lighter' menus.

CULA 270 - Purchasing and Cost Controls. 5 Credits.

Offered autumn. Prereq., CULA 101, CULA 105, and M 105 or consent of instructor. 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. 2 Credits.

Offered spring. Offered at Missoula College. Advanced principles and techniques in preparing custard sauces, pastry cream, puddings, custards, mousses, Bavarians, souffles, ices, crepes, fruits, and dessert sauces. Emphasis on presentation of plated desserts.

CULA 291 - Special Topics. 1-6 Credits.

Offered at Missoula College. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

CULA 298 - Food Service Internship. 4 Credits.

Offered autumn and spring. Offered at Missoula College. Prereq., Students must be enrolled in final semester of program and maintain a minimum "C" in all CULA (CULA & 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.

CULA 299 - Culinary Arts Capstone. 4 Credits.

Offered spring. Offered at Missoula College. Prereq./Coreq., CULA 275 and CULA 298. 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.

Curriculum and Instruction (C&I) < University of Montana

Curriculum and Instruction (C&I)

C&I 160 - Lrng Strat Higher Ed. 1-2 Credits.

Offered autumn and spring. Prereq., C&I 194. Instruction and application of college study skills including lecture note taking, time management, reading textbooks, test taking, and critical thinking. Elective credit only.

C&I 194 - Freshman Seminar I. 1-6 Credits.

(R-6) Offered autumn and spring. Prereq., consent of instr, coreq., C&I 160. A review and discussion of current research. Topics vary.

C&I 195 - Special Topics. 1-5 Credits.

(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. 3 Credits.

Offered autumn and spring. Prereq., WRIT 101 (or higher) or equivalent. Emphasis on consistent and logical approaches to solving communication problems and creating successful communication products.

Gen Ed Attributes: Writing Course-Intermediate

C&I 295 - Special Topics. 1-6 Credits.

(R-6) Offered intermittently. Offerings of visiting professors, new courses, or current topics.

C&I 296 - Independent Study. 1-6 Credits.

(R-6) Offered every term. Prereq., consent of advisor and instr.

C&I 298 - Internship. 1-6 Credits.

(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.

C&I 341 - Information Managemnt & Design. 3 Credits.

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. 1-9 Credits.

(R-9) Offered intermittently. Group analysis of problems in specific areas of education.

C&I 395 - Special Topics. 1-9 Credits.

(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. 1-6 Credits.

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.

C&I 501 - Curriculum Design, Implementation, & Evaluation. 3 Credits.

Underlying principles of design, factors affecting implementation, and evaluation and assessment of P-12 curricula at the student and program levels. Level: Graduate

C&I 502 - Philosophy of Education. 3 Credits.

Open to graduate level students in Education Leadership, Counseling, or Curriculum and Instruction. 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. 3 Credits.

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 510 - Developmental & Learning Sciences. 3 Credits.

This is an advanced course that addresses application of psychological concepts in educational settings. This course will focus on theories of development, teaching and learning, and on applications of psychological research to learning, primarily to classroom settings. Level: Graduate

C&I 514 - Education Across Cultures. 3 Credits.

Educational foundations of the study of diversity in American schools. Level: Graduate

C&I 515 - Computer/Tchnlgcl Appl in Educ. 3 Credits.

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. 3 Credits.

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. 3 Credits.

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. 3 Credits.

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. 3 Credits.

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 524 - Family and Diversity Issues. 3 Credits.

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. 1-3 Credits.

(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. 3 Credits.

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. 3 Credits.

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. 3 Credits.

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 534 - Foundation and Principles of International Baccalaureate Programs. 3 Credits.

This course is designed to provide students with an in-depth knowledge of the foundation and principles of International Baccalaureate Programs. Participants will examine the IB learner profile, the philosophical and pedagogical theories underpinning IB programs, the curriculum framework of the three IB Programs, Primary Years Program (PYP), Middle Years Program (MYP), and Diploma Program (DP), and the role of collaboration and reflection in IB schools. Level: Graduate

C&I 535 - Teaching and Learning in International Baccalaureate Programs. 3 Credits.

Prereq., C&I 534 and EDU 202 (for secondary majors) or EDU 395 (for elementary majors). This course explores theory and practice of teaching and learning in IB programs. Participants will study the main learning theories underpinning IB curricular programs, examine examples of lesson plans for each IB program, learn strategies to differentiate instruction, participate in collaborative planning and instructional design, and engage in reflective practices. This course requires a fieldwork experience in IB schools.

C&I 536 - Assessment and Learning in International Baccalaureate Programs. 3 Credits.

Prereq., C&I 534 and C&I 535. This course examines the critical role of assessment in IB programs. It addresses both formative and summative assessments as an integral part of the IB curriculum. Participants will learn how to design assessments and create effective feedback strategies based on the learning needs of students. This course requires fieldwork experience in IB schools. Level: Graduate

C&I 540 - Lang Arts Ped and Prac. 3 Credits.

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. 3 Credits.

Offered spring. 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. 3 Credits.

Offered summer odd-numbered years. Curriculum trends, instructional materials, research and supervisory techniques relevant to a modern school mathematics program. Level: Graduate

C&I 548 - Super Tchg Envir Ed. 3 Credits.

Offered spring. Design, selection, and evaluation of materials for the teaching of environmental education. Level: Graduate

C&I 552 - Models of PD Math/Sci. 3 Credits.

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. 1-6 Credits.

(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. 3 Credits.

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. 6 Credits.

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. 3 Credits.

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 561 - Introduction to Gifted/Talented Education. 3 Credits.

This course provides a broad examination of the historical and philosophical perspectives of education for gifted and talented learners with emphasis on answering the question "What is giftedness?" Issues explored in the course include broad coverage of identification procedures, psychosocial correlates of gifted learners, the nature of intelligence and creativity, instructional options, laws/policies, and current research findings. Level: Graduate

C&I 562 - Social and Emotional Development of Gifted and Talented Learners. 3 Credits.

This course provides an overview of current theory and evidence-based practices in understanding the social and emotional development of gifted learners. Topics discussed in class range from research findings addressing social and emotional health and needs of the general population of gifted students to the unique needs of specific sub-groups of gifted students (e.g., gifted girls, gifted and learning disabled, highly creative students, traditionally underrepresented gifted students). Also discussed are guidance, counseling, self-concept and adjustment concerns of gifted students. Level: Graduate

C&I 563 - Methods and Curriculum for the Gifted and Talented. 3 Credits.

This is an advanced course in the education of gifted, talented, and creative students which focuses on (1) development of curriculum shown to be effective for gifted learners, and (2) implementation of teaching practices centered on discipline-based knowledge, learning styles, cultural variation, depth and complexity of content, and provisions for case-based, authentic and independent investigation. The purpose of this course is to apply the principles and knowledge obtained in C&I 561 and C&I 562 to the classroom experiences of gifted and talented learners. It is the third course in the Certificate in Gifted and Talented Education series. C&I 561 and C&I 562 are prerequisites for the course. Level: Graduate

C&I 564 - Planning Programs for the Gifted and Talented. 3 Credits.

Prereq., C&I 561 and C&I 562.This is an advanced course in the education of gifted, talented, and creative students which addresses program models supported by research, and focuses on the fundamental principles of program design and development for gifted learners. The role of program evaluation and the use of program evaluation models are also stressed. The purpose of this course is to apply the principles and knowledge obtained in C&I 561 and C&I 562 to the classroom experiences of gifted and talented learners. It is the fourth course in the Certificate in Gifted and Talented Education series. Level: Graduate

C&I 570 - Instructional Technology Found. 3 Credits.

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. 3 Credits.

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. 3 Credits.

Same as EDLD 580. Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction. 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. 3 Credits.

Same as EDLD 581. Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction. 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. 3 Credits.

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. 3 Credits.

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 588 - Action Research in Classroom. 3 Credits.

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. 3 Credits.

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. 1-3 Credits.

(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. 1-9 Credits.

(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. 1-9 Credits.

(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. 1-6 Credits.

(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. 1-9 Credits.

(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. 1-9 Credits.

(R-9) Offered every term. Prereq., consent of instr. Supervised field experience. Level: Graduate

C&I 618 - Educational Statistics. 3 Credits.

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., SPPS-X) for research applications. Level: Graduate

C&I 620 - Qualitative Research. 3 Credits.

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. 3 Credits.

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. 1-3 Credits.

(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. 3 Credits.

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. 1-9 Credits.

(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. 1-9 Credits.

(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. 1-10 Credits.

(R-10) Offered every term. Preparation of a thesis or manuscript based on research for presentation and/or publication. Level: Graduate

Dance (DANC) < University of Montana

Dance (DANC)

DANC 000 - Spirit Squad Class Roster. 0 Credits.

DANC 100A - Introduction to Modern Dance. 3 Credits.

(R-6) Offered autumn and spring. Introduction to basic modern dance vocabulary through exercises for alignment, strength and flexibility and combinations across the floor.

Gen Ed Attributes: Expressive Arts Course (A)

DANC 108A - Dance Forms. 1-8 Credits.

(R-8) Offered autumn and spring. Introduction to basic dance vocabulary and technique in a particular style.

Gen Ed Attributes: Expressive Arts Course (A)

DANC 110A - Introduction to Ballet. 3 Credits.

(R-6) Offered autumn and spring. Introduction to basic ballet positions and steps.

Gen Ed Attributes: Expressive Arts Course (A)

DANC 115A - Introduction to Jazz Dance. 3 Credits.

(R-6) Offered autumn and spring. Introduction to basic strengthening and stretching exercises and stylistic characteristics of jazz.

Gen Ed Attributes: Expressive Arts Course (A)

DANC 129A - Dance Performance Lab I. 1 Credit.

(R-7) Offered autumn and spring. Credit for rehearsing and performing in approved Theatre & Dance productions.

Gen Ed Attributes: Expressive Arts Course (A)

DANC 130A - Introduction to Dance. 3 Credits.

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.

Gen Ed Attributes: Expressive Arts Course (A)

DANC 160A - Dance Forms: Irish. 2 Credits.

(R-8) Offered autumn and spring. Introduction to basic Irish dance vocabulary and technique.

Gen Ed Attributes: Expressive Arts Course (A)

DANC 165A - Dance Forms: African. 3 Credits.

(R-6) Offered autumn. Introduction to basic African dance vocabulary and technique.

Gen Ed Attributes: Expressive Arts Course (A)

DANC 170A - Dance Forms: Tribal Belly. 2 Credits.

(R-8) Offered intermittently. Introduction to basic tribal-style belly dance vocabulary and technique.

Gen Ed Attributes: Expressive Arts Course (A)

DANC 191 - Special Topics. 1-6 Credits.

(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. 1 Credit.

Offered autumn and spring. Introduces incoming freshmen to the world of university dance and contemporary dance as a profession.

DANC 195 - Studio/Practicum. 1-6 Credits.

(R-12) Offered intermittently. 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. Mountain Campus. Face to face.

DANC 200A - Contemporary Modern II. 2 Credits.

(R-12) Offered autumn and spring. Continuation of the modern dance vocabulary at an advanced-beginner level.

Gen Ed Attributes: Expressive Arts Course (A)

DANC 205 - Improvisation. 2 Credits.

(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. 2 Credits.

(R-12) Offered autumn and spring. Continuation of the ballet vocabulary at an advanced-beginner level.

Gen Ed Attributes: Expressive Arts Course (A)

DANC 215A - Jazz Dance II. 2 Credits.

(R-12) Offered autumn. Continuation of the jazz vocabulary at an advanced-beginner level.

Gen Ed Attributes: Expressive Arts Course (A)

DANC 217 - Musical Theatre Styles. 2 Credits.

(R-4) Offered spring. Prereq., DANC 100A and DANC 110A and DANC 115A. A foundational course in techniques and styles of dance and choreography for musical theatre.

DANC 220 - Creative Practice I. 2 Credits.

(R-4) Offered autumn. 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.

DANC 225 - Rehearsal & Performance. 1-4 Credits.

(R-24) Offered autumn and spring. Open to students who are choreographing a dance for a concert or to those who have been selected through audition to perform.

DANC 227 - Community Dance Initiatives. 1 Credit.

(R-8) Offered autumn and spring. This course formalizes program activities students practice each semester, ranging from national and regional to local dance initiatives. Introduces methods, philosophies, and approaches to assist in students success in utilizing dance as a tool to conduct community engagement.

DANC 229A - Dance Performance Lab II. 1 Credit.

(R-7) Offered autumn and spring. Credit for rehearsing and performing in approved Theatre & Dance productions.

Gen Ed Attributes: Expressive Arts Course (A)

DANC 234L - Dance in Popular Movies. 3 Credits.

Offered spring. 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.

Gen Ed Attributes: Lit & Artistic Studies (L)

DANC 280 - Dance Conditioning: Pilates. 1 Credit.

(R-8) Offered intermittently . Pilates mat (floor) exercises to build core control, strength and flexibility.

DANC 291 - Special Topics. 1-3 Credits.

DANC 294 - Seminar/Workshop. 1 Credit.

Offered autumn and spring. One-time offerings of current topics.

DANC 295 - Student Teaching: Childrens Dance. 1 Credit.

Offered autumn and spring. Students participate and gain beginning-level teaching experience in two of four dance classes for children ranging in ages from 3.5 to 12 years old.

DANC 298 - Cooperative Eductn/Internship. 1 Credit.

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.

DANC 300 - Contemporary Modern III. 1 Credit.

(R-8) Offered autumn and spring. Extension of the modern dance vocabulary through lengthier combinations of movement.

DANC 305 - Contact Improvisation. 2 Credits.

(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. 1 Credit.

(R-8) Offered autumn and spring. Development of ability to combine steps; carriage of head and arms.

DANC 315 - Jazz III. 1 Credit.

(R-6) Offered spring. Continuation of DANC 215A.

DANC 320 - Creative Practice II. 2 Credits.

(R-6) Offered spring odd-numbered years. Explores ways to manipulate several dancers in space, through repetition of shapes, through related rhythms. May include choreography for videotape.

DANC 322 - Dance Touring. 1-4 Credits.

(R-24) Offered autumn and spring. Prereq., audition. Rehearsal and touring to the community.

DANC 325 - Spirit Squad. 1 Credit.

(R-10) 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.

DANC 327 - Advanced Rehearsal and Performance. 1-4 Credits.

(R-24) Offered autumn and spring. Prereq., DANC 225 and class level of JR/SR. Open to junior/senior dance majors and minors who are choreographing a dance for a university dance concert or who have been selected through audition to perform. Enrolled students engage in creative practices to enhance overall artistry, personal voice and nuance in choreography and performance.

DANC 329 - Dance Stage Management Practicum. 1 Credit.

(R-6) Offered autumn and spring. Stage management practicum involving stage managing or assistant stage managing a dance production. Involves evening and weekend work.

DANC 334 - Dance History. 2 Credits.

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.

DANC 345 - New Visions Dance. 1 Credit.

(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 360L - World Dance. 3 Credits.

(R-6) Offered spring even-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.

Gen Ed Attributes: Lit & Artistic Studies (L), Cultural Intl Diversity (X)

DANC 380 - Science of Dance Movement. 3 Credits.

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. 1-24 Credits.

(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. 1-3 Credits.

(R-24) Offered autumn and spring. Prereq., consent of instr.

DANC 394 - Seminar/Workshop. 1 Credit.

(R-2) Offered autumn and spring. One-time offerings of current topics.

DANC 395 - Studio/Practicum. 1-6 Credits.

(R-12) Offered intermittently. 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. 1 Credit.

(R-6) Offered autumn and spring. 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. 1 Credit.

(R-6) Offered autumn and spring. Performance of exercises and combinations that are technically demanding in strength, balance, weight, agility and line.

DANC 404 - Advanced Contemporary Modern. 1 Credit.

(R-6) Offered autumn and spring. Continuation of DANC 400.

DANC 405 - Advanced Improvisation. 2 Credits.

(R-6) Offered intermittently. 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. 2 Credits.

(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. 1 Credit.

(R-8) Offered autumn and spring. Continues to build on skills developed in Ballet III; emphasis on developing advanced petite allegro, grand allegro, turns, and artistry.

DANC 440 - Dance Pedagogy. 2 Credits.

(R-6) Offered autumn even-numbered years. Methods and experiences in teaching modern dance, ballet and jazz.

DANC 446 - Teaching Projects. 1-6 Credits.

(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. 1-24 Credits.

(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. 1-6 Credits.

(R-9) Offered autumn and spring. Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student.

DANC 494 - Junior/Senior Seminar. 3 Credits.

(R-6) Offered spring odd-numbered years. Prereq., WRIT 101 or equivalent, and one intermediate writing course. Seminar to discuss both practical and philosophical issues confronting dance students about to enter the "real" world.

Gen Ed Attributes: Writing Course-Advanced

DANC 495 - Practicum/Field Work. 1-6 Credits.

(R-6) Offered autumn and spring. 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. 2 Credits.

Offered spring. Prereq., consent of instr. Experience in planning, observing and directing creative movement as a teaching tool in K-5.

DANC 499 - Senior Thesis/Creative Project. 1 Credit.

(R-2) Offered autumn and spring. Prereq., DANC 399. Independent study in choreography or teaching. The student is responsible for setting up the project. An initial proposal, a journal, and a paper are required.

DANC 591 - Special Topics. 1-6 Credits.

(R-6) Offered autumn and spring. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. Level: Graduate

DANC 595 - Studio/Practicum. 1-6 Credits.

(R-12) Offered intermittently. 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. Mountain Campus. Face to face.

Diesel Service Tech (DST) < University of Montana

Diesel Service Tech (DST)

DST 120 - Electrical Systems. 8 Credits.

Offered spring. Offered at Missoula College. 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.

DST 128 - Engine Service I. 4 Credits.

Offered autumn. Offered at Missoula College. 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 DST 135 Power Trains the second-half of the semester.

DST 135 - Power Trains. 7 Credits.

Offered autumn. Offered at Missoula College. Chassis and drive train components used in light and heavy-duty trucks and other equipment. Clutches, manual transmissions, differentials, and final drives are covered.

DST 191 - Special Topics. 1-6 Credits.

(R-6) Offered at Missoula College. Experimental offerings of visiting professors, experimental offerings of new courses, or one time offerings of current topics.

DST 192 - Independent Study. 1-6 Credits.

(R-6) Offered at Missoula College. Offered every term. Course material appropriate to the needs and objectives of the individual student.

DST 221 - Brakes Suspn and Undercarr. 6 Credits.

Offered autumn. Offered at Missoula College. 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 DST 225, Hydraulics in the second-half of the semester.

DST 225 - Hydraulics. 6 Credits.

Offered autumn. Offered at Missoula College. 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.

DST 229 - Engine Service II. 7 Credits.

Offered spring. Offered at Missoula College. Prereq., DST 128. 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 DST 230, Air Conditioning in the second-half of the semester.

DST 230 - Air Conditioning. 3 Credits.

Offered spring. Offered at Missoula College. Prereq., DST 120 and DST 225. 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. 5 Credits.

Offered spring. Offered at Missoula College. 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.

DST 235 - Advanced Power Trains. 2 Credits.

Offered spring. Offered at Missoula College. Prereq., DST 135. A continuation of DST 135 with an emphasis on heavy automatic transmission, torque converters, and powershift transmission. In-depth coverage of component review troubleshooting and repair.

Drafting Design (DDSN) < University of Montana

Drafting Design (DDSN)

DDSN 113A - Technical Drafting. 3 Credits.

Offered autumn. An introduction to the techniques and standard practices of communicating technical graphics. The class studies and practices drawing skills and learns the drawing standards that support the needs of the design team in advancing ideas. It also provides the foundation for successful drawing communication in the CAD environment. Topics covered include; drawing media and tools, hand drawing skills, perspectives, views, sketching, standard scales, geometric construction, sections, dimensioning, and tolerances.

Gen Ed Attributes: Expressive Arts Course (A)

DDSN 114 - Introduction to CAD. 3 Credits.

Offered autumn. Offered at Missoula College. M 090/M 111 or equivalent. An introduction to computer aided design and drafting software for production of drawings and plans for architecture and engineering systems. Fundamentals of two dimensional drafting and drawing management for professional design.

DDSN 116 - 3D CAD. 3 Credits.

Offered autumn. Offered at Missoula College Prereq. or Co-req., DDSN 114. CAD II provides a project-based, in-depth study of the skills and concepts involved in Computer Aided Design and Drafting. Topics covered include object grouping and sharing; three dimensional modeling; animation; and interoperability with other software. This course is the second in a two-part series covering the core AutoCAD application.

DDSN 135 - Solidworks. 3 Credits.

Offered autumn and spring. Offered at Missoula College. This course introduces the fundamentals of Solidworks 3D parametric feature-based CAD software for the creation of parts, assemblies, drawings, rendering, and animation. The course approach is designed to bring the real power of SolidWorks as a powerful modeling and design system in addition to the individual tools and functionalities available in the software. Hands-on trainings are emphasized throughout the course to ensure that the students gain practical skills to efficiently use SolidWorks based on a sound understanding of the theoretical concepts of 3D modeling and design.

DDSN 191 - Special Topics. 1-6 Credits.

(R-6) Offered intermittently. Offered at Missoula College. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

DDSN 192 - Independent Study. 1-6 Credits.

(R-6) Offered intermittently. Offered at Missoula College. Prereq., consent of instr. Independent research in geography or planning.

DDSN 244 - GIS Mapping. 3 Credits.

Offered Spring. Offered at Missoula College. Basics of geospatial technologies; remotely sensed imagery, GIS, and GPS and how each of the individual areas can be used together to analyze spatial datasets. Students will explore a wide range of spatial data and will learn to apply these data sets to real-world solutions.

DDSN 245 - Civil Drafting. 4 Credits.

Offered spring. Offered at Missoula College. Prereq. DDSN 114. Introduces students to computer aided design software for common survey and engineering design and drafting applications. Topics include collection of survey data; the coordinate geometry system; surfaces; subdivision and land planning; road design and corridor modeling; utilities; site grading and drainage; mapping; and 3D visualization.

Early Childhood Education (EDEC) < University of Montana

Early Childhood Education (EDEC)

EDEC 408 - Early Childhood Principles and Practices. 3 Credits.

Prereq., Admission to the Teacher Education Program in early childhood: P-3. 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.

EDEC 410 - Families, Communities, Culture. 3 Credits.

Prereq., Admission to the Teacher Education Program in early childhood: P-3. 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.

EDEC 420 - Implementing Standards and Assessment in Play-Based Environments. 3 Credits.

Prereq., Admission to the Teacher Education Program in early childhood: P-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. Students will explore the significance of assessment in designing curriculum and early childhood environments including the relationship between assessment and outcomes, examine and critique different assessment tools and strategies, develop and implement assessment plans, and practice skills in collaboration to form assessment partnerships.

EDEC 430 - SocEmot Dvlpmnt in Yng Child. 3 Credits.

Prereq., Admission to the Teacher Education Program in early childhood: P-3. 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.

EDEC 453 - Early Childhood STEM. 3 Credits.

Prereq., Admission to the Teacher Education Program in early childhood: P-3. This class must be taken concurrently with Level 4 courses and is restricted to students who have completed coursework in Levels 1, 2, and 3. This course is designed to address the following questions. How do K-3 students construct science and engineering understandings? Which classroom conditions foster opportunities for students to learn and enjoy science and engineering? What teaching strategies engage students in doing and understanding science and engineering? What does it mean to be a culturally responsive science and engineering teacher?

EDEC 491 - Special Topics. 1-6 Credits.

(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.

EDEC 495 - EC Fieldwork/Practicum: Integrated Curriculum. 3 Credits.

Offered autumn. Prereq., admission to the Teacher Education Program in early childhood: P-3. 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 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.

EDEC 508 - Early Childhood Principles and Practices. 3 Credits.

Offered autumn. 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

EDEC 515 - Educational Professionals Wrkg Families Experiencing Adversity. 3 Credits.

Offered even summer. 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 educational lens and will include the impact of family adversity on child development and learning, the role of educational 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. 3 Credits.

Offered spring of even 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. In addition to advanced outcomes and assessment, students enrolled in EDEC 520 will develop and present information at an early childhood conference. Level: Graduate

EDEC 530 - Social and Emotional Development in Young Children. 3 Credits.

Offered spring odd years. This online 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. Level: Graduate

EDEC 540 - Neuroscience and Its Impact on Child Development. 3 Credits.

Offered autumn. 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 560 - Public Policy, Advocacy, and Leadership in ECE. 3 Credits.

Offered spring. 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 591 - Special Topics. 1-9 Credits.

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

EDEC 595 - Early Childhood Fieldwork/Practicum. 3 Credits.

Offered spring. 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. Level: Graduate

Earth Systems (ERTH) < University of Montana

Earth Systems (ERTH)

ERTH 303N - Weather and Climate. 3 Credits.

Offered spring. 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.

Gen Ed Attributes: Natural Science Course (N)

Economics (ECNS) < University of Montana

Economics (ECNS)

ECNS 099 - Developmental. 1-99.99 Credits.

ECNS 99 - Developmental. 1-99.99 Credits.

ECNS 101S - Economic Way of Thinking. 3 Credits.

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.

Gen Ed Attributes: Social Sciences Course (S)

ECNS 191 - Special Topics. 1-6 Credits.

(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. 3 Credits.

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.

Gen Ed Attributes: Social Sciences Course (S)

ECNS 202S - Principles of Macroeconomics. 3 Credits.

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.

Gen Ed Attributes: Social Sciences Course (S)

ECNS 217X - Issues in Economic Development. 3 Credits.

Offered intermittently. Prereq., ECNS 201S. Study of the processes of economic growth and development in the less developed world.

Gen Ed Attributes: Cultural Intl Diversity (X)

ECNS 301 - Intermediate Micro with Calc. 3 Credits.

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. 3 Credits.

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. 3 Credits.

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. 3 Credits.

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. 3 Credits.

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. 3 Credits.

Offered intermittently. Prereq., ECNS 201S. Rationale for governmental expenditure; public goods; public choice. Analysis of expenditure policy. Intergovernmental relations.

ECNS 325 - Economics of Sports. 3 Credits.

Offered intermittently. Prereq., ECNS 201S. This course applies economic theories and tools to better understand the professional and amateur sports markets. Level: Undergraduate

ECNS 391 - Special Topics. 1-9 Credits.

(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. 1-9 Credits.

(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. 1-6 Credits.

(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.

ECNS 403 - Introduction to Econometrics. 4.000 Credits.

Offered autumn. Prereq., an introductory statistics course. Quantitative methods in economics with emphasis on regression analysis.

ECNS 405 - Game Theory. 3 Credits.

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. 3 Credits.

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. 3 Credits.

Offered intermittently. Prereq., ECNS 201S 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. 3 Credits.

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.

ECNS 445 - Int Env Econ & Clim Change. 3 Credits.

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.. 3 Credits.

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. 3 Credits.

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 481 - Communicating Economics. 3 Credits.

Prereq., WRIT 101 or equivalent, and one intermediate writing course. In this course, students will integrate and apply the knowledge they have gained through the Economics major and develop their skills in communicating that knowledge. Students will apply economic theory and evidence to practical problems faced by themselves, policymakers, businesses or other economic agents. Students will practice identifying the economic principles behind observed problems or interesting phenomena, applying economic models to analyze these topics, and communicating this knowledge in different ways to a range of audiences. Additionally, students will learn to read academic research papers and synthesize the findings in order to answer practical questions. Level: Undergraduate

Gen Ed Attributes: Writing Course-Advanced

ECNS 488 - Res Meth & Thesis Design. 2 Credits.

Offered autumn. Prereq., senior standing, economics major. Development of senior thesis proposal; presentation of research topics and methods by economics faculty and seminar participants.

Gen Ed Attributes: Writing Course-Advanced

ECNS 491 - Special Topics. 1-9 Credits.

(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. 1-15 Credits.

(R-15) Offered intermittently. Prereq., 12 credits in economics and consent of instr.

ECNS 494 - Senior Seminar. 2 Credits.

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. 2 Credits.

Offered spring. Prereq., senior standing, economics major. Completion of senior thesis; presentation of results by seminar participants.

Gen Ed Attributes: Writing Course-Advanced

ECNS 501 - Graduate Research. 1-6 Credits.

(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. 3 Credits.

Offered autumn. Prereq., ECNS 301. Advanced theoretical treatment of consumer and producer behavior. Level: Graduate

ECNS 513 - Macroeconomic Theory. 3 Credits.

Offered spring. Prereq., ECNS 302. Advanced theoretical treatment of national income determination, unemployment and inflation. Level: Graduate

ECNS 560 - Advanced Econometrics. 4.000 Credits.

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. 1-3 Credits.

(R-6) Offered every term. Role and scope of empirical research. Planning and conduct of a research project. Level: Graduate

ECNS 595 - Special Topics. 1-9 Credits.

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

ECNS 596 - Independent Study. 1-9 Credits.

(R-9) Offered intermittently. Course material appropriate to the needs and objectives of the individual student. Level: Graduate

ECNS 598 - Internship. 1-9 Credits.

(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

ECNS 599 - Thesis. 1-12 Credits.

(R-9) Offered every term. Preparation of a thesis or manuscript based on research for presentation and/or publication. Level: Graduate

Education K-12: Library Media (LIBM) < University of Montana

Education K-12: Library Media (LIBM)

LIBM 461 - Information Literacy. 3 Credits.

Offered spring. Instructional techniques for teaching literacy skills, information retrieval, research, and lifelong learning; exploration of how curriculum is designed and how library instruction is integrated into the classroom; collaborative planning, methods of library instruction, and its assessment; development of an integrated unit; and creation of a school research process model.

LIBM 462 - Youth Literature for Librarians. 3 Credits.

Offered autumn even years and spring even years. Students will develop strategies for presenting fiction and non-fiction literature from the librarian's role as advocate of reading and collaborative co-teacher, encouraging children to cultivate a lifelong proclivity for reading for information and for pleasure; includes a focus on Indian Ed for All.

LIBM 464 - Reference Resources. 3 Credits.

Offered intermittently. Evaluation, selection, and use of basic reference resources. Teaching of media skills, information negotiation, search strategies, database use, and information services.

LIBM 466 - Libraries & Technology. 3 Credits.

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 467 - Collection Development & Cataloging. 4 Credits.

Offered autumn. Students will develop policies and procedures for creating, maintaining and cataloging print and non-print materials in the school library.

LIBM 468 - Admin & Assess of Library Programs. 3 Credits.

Administrating and managing the school library space, materials, budget, and programs. Assessing the library program in terms of effectiveness, instructional collaboration, and district support, using state, regional and national guidelines for library programs and services.

LIBM 491 - Special Topics. 1-6 Credits.

(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. 1-3 Credits.

(R-6) Offered every term. Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student.

LIBM 495 - Practicum. 2 Credits.

Offered spring and summer. Prerequisite: 16 credits in library and consent of instructor. Supervised field experience in selected phases of library operations, including assessment.

Education K-12: Special Edu (EDSP) < University of Montana

Education K-12: Special Edu (EDSP)

EDSP 401 - Intro Early Intervention. 3 Credits.

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, transdisciplanary 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. 3 Credits.

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. 3 Credits.

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. 3 Credits.

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. 3 Credits.

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. 3 Credits.

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. 3 Credits.

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. 3 Credits.

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. 1-10 Credits.

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) < University of Montana

Education-K-12 (EDU)

EDU 162 - NCAA Student-Athlete Exp.. 1 Credit.

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. 1 Credit.

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. 1 Credit.

Offered autumn and spring. Prereq., admission to Teacher Education Program in secondary and K-12. 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 212 - Successful Education Abroad. 1 Credit.

This course fully prepares students for their education abroad experience. Their health and safety preparations include insurance, safety and education abroad videos, presentations on health care issues abroad and addressing emotional well-being while away from home. The logistical preparations include information and assistance with student visa application process, as well as registration at UM and abroad, credit transfer and billing. The cultural component of the class includes more specifically learning about cultural theories, intercultural communication, cultural adaptation, culture shock and re-entry culture shock as well as panel and small group discussions with former U of M study abroad participants and international students. Student are required to complete five weekly journal entries, interview paper, and final host country research paper. This course also prepares the student to be an ambassador for the University of Montana, while abroad.

EDU 221 - Ed Psych & Measuremnt. 3.000 Credits.

Offered autumn and spring. Prereq., admission to Teacher Education program in secondary and K-12. 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. 3.000 Credits.

Offered autumn and spring. Prereq., Admission to the Teacher Education Program in elementary or early childhood: P-3. This course must be taken concurrently with Level 1 courses. This course will examine the classroom practices that impact elementary aged childrens 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 294 - Seminar/Workshop. 1-9 Credits.

EDU 331 - Lit & Literacy for Children. 3 Credits.

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. 3 Credits.

Offered autumn and spring. Prereq., Admission to the Teacher Education Program in elementary or early chiildhood:P-3. 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. 3 Credits.

Offered autumn and spring. Prereq., admission to the Teacher Education Program in elementary education. This class must be taken concurrently with Level 2 courses. 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.

Gen Ed Attributes: Writing Course-Advanced

EDU 340 - Classroom Management. 3 Credits.

Offered autumn and spring. Prereq., Admission to the Teacher Education Programin elementary edcuation. 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 - Excptnlty & Clsrm Mgmt. 3 Credits.

Offered autumn and spring. Prereq., Admission to the Teacher Education Program in secondary and K-12. 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. 3 Credits.

Offered autumn and spring. Prereq., Admission to the Teacher Education Program in elementary or early childhood: P-3. 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. 3.000 Credits.

Offered autumn and spring. Prereq., Admission to the Teacher Education Program and general computer literacy skills. Integration and use of computer and other technologies in education.

EDU 392 - Independent Study. 1-9 Credits.

(R-9) Offered autumn and spring. Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student.

EDU 394 - Seminar/Workshop. 1-9 Credits.

EDU 395 - Clinical Experience. 1 Credit.

(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.

EDU 397 - Methods: Teaching & Assessing. 3 Credits.

(R-15) Offered autumn and spring. Prereq., admission to the Teacher Education Program in elementary or early childhood: P-3 and WRIT 101 or equivalent, and one intermediate writing course. This course number is used for multiple methods courses. Check the class schedule or with your advisor regarding appropriate sections.

Gen Ed Attributes: Writing Course-Advanced

EDU 407E - Ethics & Policy Issues. 3.000 Credits.

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.

Gen Ed Attributes: Ethical & Human Values Course

EDU 421 - Statistical Procedures in Educ. 3 Credits.

Prereq., M 115 or equiv. or consent of instr. Concepts and procedures characterizing both descriptive and inferential statistics. Awareness of common statistical errors.

EDU 432 - Lit & Literacy for Yng Adlts. 3 Credits.

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. 3 Credits.

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. 3 Credits.

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. 1 Credit.

(R-2) Offered autumn and spring. Prereq., Admission to the Teacher Education Program in elementary. 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 455 - Workshop. 1-6 Credits.

(R-6) Offered intermittently. Special courses experimental in nature dealing with a relatively narrow, specialized topic of particular current interest. Credit not allowed toward an undergraduate degree. Level: Undergraduate

EDU 456 - Applictn of Literacy Modls K12. 6 Credits.

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 461 - Introduction to Gifted/Talented Education. 3 Credits.

This course provides a broad examination of the historical and philosophical perspectives of education for gifted and talented learners with emphasis on answering the question "What is giftedness?" Issues explored in the course include broad coverage of identification procedures, psychosocial correlates of gifted learners, the nature of intelligence and creativity, instructional options, laws/policies, and current research findings.

EDU 462 - Social and Emotional Development of Gifted and Talented Learners. 3 Credits.

This course provides an overview of current theory and evidence-based practices in understanding the social and emotional development of gifted learners. Topics discussed in class range from research findings addressing social and emotional health and needs of the general population of gifted students to the unique needs of specific sub-groups of gifted students (e.g., gifted girls, gifted and learning disabled, highly creative students, traditionally underrepresented gifted students). Also discussed are guidance, counseling, self-concept and adjustment concerns of gifted students.

EDU 472 - Dev Digital Rich Workplace. 3 Credits.

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. 3 Credits.

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. 1-6 Credits.

(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. 1-6 Credits.

(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. 1-9 Credits.

(R-9) Required seminar during student teaching. Prereq., admission to the Teacher Education Program. 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. 1-14 Credits.

(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.

EDU 497 - Teaching and Assessing. 4.000 Credits.

(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.

EDU 607 - Seminar in Ethics. 3 Credits.

The doctoral Seminar in Ethics presents a rigorous examination of the evolution of ethical theory through the lens of pedagogy and curricula. Beginning with religious and philosophical texts from the ancient world, the course moves through the major positions on ethics and moral development in the west. These include the Socratic Method, Virtue Theory, Lockean Pedagogy, the Categorical Imperative, Utilitarianism, Modern Discipline, Democratic Ethics, Moral Reasoning, Feminist Ethics, and Intersubjectivity. These topics will all be accessed through primary source texts. Level: Graduate

EDU 611 - Professional Seminar 1: Conducting Literature Reviews. 1 Credit.

Prereq., Admission to PhD program. This course will provide students with the knowledge and skills required to be knowledgeable consumers and effective creators of literature reviews in education and social sciences. Students will critically analyze the multiple components of the literature review in peer-reviewed journal articles relevant to their individual fields of interest, and write a publishable-quality literature review designed to address a question that is not answered in the research related to this field. Level: Graduate

EDU 612 - Pro-Sem 2. 2 Credits.

Prereq., Admission to PhD program. This course will prepare students to understand model of field supervision and to carry out effective student teaching supervision. Additionally, students will learn key skills to become high-quality college-level instructors including course planning, pedagogical strategies and evaluation techniques. Level: Graduate

EDU 613 - Professional Seminar 3: Grant Writing. 1 Credit.

Prereq., Admission to the PhD program. This course teachers students about the grant writing process. The course will span everything from searching for fundable opportunities that compliment the students' research interests to establishing a research team and community partners to writing an actual proposal. Level: Graduate

EDU 616 - Professional Seminar 4: Professional Presentations and Writing for Publication. 1 Credit.

Prereq., Admission to the Ph.D. program. In this course, students will learn how to craft conference presentations and academic papers for publication through discussion and presentation. Students will read and discuss sources on data visualization, academic writing, and presentation through storytelling. Students will also transform academic research that they have done into a conference presentation and manuscript for publication in a scholarly journal. Level: Graduate

EDU 617 - Seminar in Policy and Policy Implementation. 2 Credits.

Prereq., Admission to the PhD program. This course is part of a new, proposed Ph.D. program in Teaching and Learning that the Department of Curriculum and Instruction has submitted for the 2015-2016 review cycle. This course is part of the professional seminar series that all Ph.D. students in the program will take to help train them as future faculty. Level: Graduate

EDU 621 - Advanced Qualitative Research Methods. 3 Credits.

Building on content from CI 620 (Qualitative Methods), this course requires students to deeply explore and apply the most important concepts involved in qualitative research, including: conceptual framework and research design, interviewing and observation, data analysis, and reporting analytic methods and findings. Students will engage directly with qualitative researchers, evaluate published qualitative studies, and apply design, data collection, analysis, and reporting concepts as they work on their own study. Level: Graduate

EDU 626 - Mixed Methods Research Design. 3 Credits.

This is an advanced doctoral seminar that aims to provide a comprehensive overview of research design. This overview consists of understanding the preliminary considerations that go into selecting a qualitative, quantitative, or mixed methods research design. These include knowing the definition for these different approaches, considering philosophical worldviews, reviewing the literature, understanding the use of theory, anticipating ethical issues, and developing writing strategies. We will discuss the process of research as it relates to each approach. This process includes writing an introduction, specifying a purpose statement, and developing research questions and/or hypotheses. This course will also discuss the methods and procedures for quantitative, qualitative, and mixed methods studies. Level: Graduate

EDU 627 - Single Subject Research Designs. 3 Credits.

This is an introductory level course concentrating on single-case designs for educational and therapeutic interventions in applied and clinical settings, data collection and graphing procedures, and visual inspection and inference of data along with statistical analysis. Level: Graduate

EDU 628 - Instrument Development for Research and Evaluation. 3 Credits.

The purpose of this course is to explore instrument development as it relates to the social-behavioral sciences. Particular focus will be given to psychological and educational instruments, how tests are developed and how to determine the reliability and validity of instruments. The course explores instrument development as it relates to both research and program evaluation. Models of program evaluation will be explored and students will complete an evaluation of a program using at least one instrument he or she developed. Level: Graduate

Educational Leadership (EDLD)

EDLD 295 - Special Topics in Ed Amin. 1-3 Credits.

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 486 - Statistical Proc in Education. 3 Credits.

Offered autumn. Prereq., M 115 or equiv. or consent of instr. Concepts and procedures characterizing both descriptive and inferential statistics. Awareness of common statistical errors.

EDLD 495 - Special Topics. 1-9 Credits.

(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. 3 Credits.

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 519 - Analysis of Ed Data. 3 Credits.

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. 3 Credits.

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. 3 Credits.

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. 3 Credits.

Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. Survey of todays 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. 3 Credits.

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. 3 Credits.

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 Leadership. 3 Credits.

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. 3 Credits.

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. 3 Credits.

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. 3 Credits.

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. 3 Credits.

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. 3 Credits.

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. 3 Credits.

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. 3 Credits.

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 of curriculum. Exploration of issues related to selected instructional models and practices; school improvement. Level: Graduate

EDLD 583 - Strategic Plng For Tech. 3 Credits.

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. 2-3 Credits.

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. 1-9 Credits.

(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. 1-9 Credits.

(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. 1-6 Credits.

(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. 1-9 Credits.

(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. 1-12 Credits.

(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. 1-9 Credits.

(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. 3 Credits.

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. 3 Credits.

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. 3 Credits.

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. 3 Credits.

Prepreq., 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. 3 Credits.

Prepreq., 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. 3 Credits.

Prepreq., 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. 3 Credits.

Prepreq., 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. 3 Credits.

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. 3 Credits.

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. 3 Credits.

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. 3 Credits.

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. 3 Credits.

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. 3 Credits.

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 - International Program Dev. 3 Credits.

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. 3 Credits.

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. 1-3 Credits.

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. 1-3 Credits.

(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. 3 Credits.

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.

EDLD 679 - Linguistic Diversity. 3 Credits.

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.l Ed.. 3 Credits.

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 682 - Cross-Cultural Competence. 3 Credits.

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.l Persp.. 3 Credits.

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. 1-9 Credits.

(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 695 - Special Topics. 1-9 Credits.

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

EDLD 697 - Adv Research Ed Ad Super. 1-9 Credits.

(R-9) Open to graduate level students in Education Leadership, Counseling or Curriculum and Instruction majors. Directed individual research and study appropriate to the back ground and objectives of the student. Level: Graduate

EDLD 699 - Prof Sem/Dissertation. 1-12 Credits.

(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

Electrical Engineering (EELE) < University of Montana

Electrical Engineering (EELE)

EELE 201 - Circuits I for Engineering. 4 Credits.

Prereq., PHSX 217N and EGEN 101. Introduction to circuit analysis; Ohm's and Kirchhoff's Laws; resistors, capacitors, inductors, dependent sources, ideal op-amps; the complete response of first order circuits; complex frequency and phasors; steady-state AC circuits, coupled inductors and ideal transformers.

EELE 203 - Circuits II for Engineers. 4 Credits.

Prereq., EELE 201; Coreq., M 274. Natural and forced response of R-L-C circuits, frequency response of R-L-C circuits and Bode plots, frequency response, slew-rate and DC imperfections of real op-amps; Laplace Transform, Fourier series and Fourier Transform techniques in circuit analysis; basic R-L-C and op-amp filters; two port networks.

EELE 292 - Independent Study. 1-6 Credits.

(R-6) Offered every term. Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student.

Electronics Technology (ETEC)

ETEC 106 - AC Circuit Analysis. 3 Credits.

Offered autumn and spring. Offered at Missoula College. Analysis of alternating current (AC) circuits and the behavior of capacitors, inductors, reactance, impedance, transformers, and signal filters. Laboratory experiments include circuit analysis, the use of proper measurement equipment, and troubleshooting.

ETEC 113 - Circuits Lab. 1 Credit.

Offered autumn. Offered at Missoula College Prereq/Co-req., ETEC 105 and 106. Covers proper techniques of soldering and tool usage. Electronic technical language, hands on troubleshooting skills and basic electronic measurements are involved.

ETEC 191 - Special Topics. 1-6 Credits.

(R-6) Offered Intermittently. Offered at Missoula College. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

ETEC 213 - Power Systems Technology. 3 Credits.

Offered spring. Offered at Missoula College. Prereq., ETEC 106, M 121, Prereq/Co-req., M 122. A review of the principles of electricity, magnetism, and transformer action; the application of these principles in the operation of single-phase and three-phase ac/de motors, alternators, and generators; and the control methods for these electrical devices.

ETEC 214 - Energy Storage and Dist.. 3 Credits.

Offered spring. Offered at Missoula College. Prereq. ETEC 106, NRGY 101, and M 121 or consent of instructor. Studies storage and transport methods of different types of energy. Explores emergent technologies and mechanisms designed to enhance efficiency and safety, including `smart grid? technologies; assesses relative social, ec\onomic and environmental merits of each type of energy system in terms of its storage and distribution.

ETEC 240 - Robotics. 3 Credits.

Offered spring. Offered at Missoula College. Prereq. or Co-req., ETEC 250. Explores physical and operating characteristics of a robot. Topics include robot configurations, power supplies, control systems, end effectors, sensors, stepper motors and stepper controls. Robot programming also is covered and a typical robot is programmed to perform repetitive actions. Includes hands-on labs.

ETEC 245 - Digital Electronics. 4 Credits.

Offered autumn. Offered at Missoula College. Prereq., ETEC 250. Explores digital electronic circuits and devices that make up a computer system. Topics include binary and hexadecimal number systems, Boolean algebra and digital logic theory, simple logic circuits, combinational logic, and sequential logic. Also covered is the analog-to-digital and digital-to-analog interfaces between a digital system and the real (analog) world. Includes hands-on labs.

ETEC 250 - Solid State Electronics I. 4 Credits.

Offered spring. Offered at Missoula College. Prereq. ETEC 105. An introduction to semiconductor technologies used in solid state electronics with an emphasis on diodes and transistors. Classroom concepts are reinforced through lab-based experiments.

ETEC 260 - Data and Network Communication. 3 Credits.

Offered autumn. Prereq., ETEC 250. Explores the principles, applications, and theory of data communication systems. Topics include communication concepts and terminology, analog and digital channel characteristics, signaling techniques for analog and digital data, communication codes, transmission media, and standards and protocols for various data communication systems including computer networks, and the public switched telephone network. Includes hands-on labs.

ETEC 265 - Control Systems. 4 Credits.

Offered autumn. Offered at Missoula College. Prereq., ETEC 250. The course provides a comprehensive coverage of components, circuits, instruments, and control techniques used in continuous and discrete automatic control systems, and focuses on basic principles, operation and applications. Programming, interfacing, and applications of programmable logic controllers are emphasized, including PLC hardware components, ladder logic diagram, fundamentals of PLC programming, and PLC interfacing and troubleshooting. Laboratory experiments and course projects are included in the course.

ETEC 270 - Wireless Communications. 4 Credits.

Offered autumn. Prereq., ETEC 250. Explores audio and radio frequency (RF) circuits. Topics include AM and FM signal modulation and demodulation, RF transmitters, RF receivers, RF amplifiers, audio amplifiers, oscillators, mixers, and antennas. Includes hands-on labs.

ETEC 275 - Microprocessors and Microcontrollers. 4 Credits.

Offered spring. Offered at Missoula College. Prereq., ETEC 250 and prereq/co-req., CSCI 113. The course introduces the fundamental concepts, basic principles of the architecture, organization, operation and applications of microprocessors and microcontrollers. Programming in assembly language and in C, and interfacing of microprocessor systems are emphasized. Laboratory experiments and course projects are included in the

course to increase the hands-on skills of the students.

ETEC 291 - Special Topics. 1-6 Credits.

(R-6) Offered Intermittently. Offered at Missoula College. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

ETEC 292 - Independent Study. 1-6 Credits.

ETEC 295 - Special Topics. 1-6 Credits.

(R-6) Offered Intermittently. Offered at Missoula College. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

ETEC 298 - Internship. 2 Credits.

Offered intermittently. Offered at Missoula College. Consent of instructor required. Extended classroom experience providing practical application of classroom learning through on the job training in a student's field of study. This experience increases student skills, prepares them for initial employment, and increases occupational awareness and professionalism.

ETEC 299 - Electronics Capstone. 3 Credits.

Offered spring. Offered at Missoula College. Prereq., ETEC 275. Completion of project prototypes. Includes comprehensive final project from conception to market.

Emergency Care Provider (ECP) < University of Montana

Emergency Care Provider (ECP)

ECP 102 - Wilderness First Aid. 1-6 Credits.

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

ECP 120 - Emergency Medical Responder Lecture. 3 Credits.

Offered every term. Development of knowledge of emergency care and CPR/AED techniques.Provides certifications by the Emergency Care & Safety Institute (ECSI) and the American Heart Association (AHA) upon successful completion.

ECP 121 - Emergency Medical Responder Lab. 1 Credit.

Offered every term. Coreq., ECP 120. Development of knowledge of emergency care and CPR/AED techniques. In conjunction with ECP 120 provides certification by the American Academy of Orthopedic Surgeons and the American Heart Association upon successful completion.

ECP 122 - Wilderness First Responder. 2 Credits.

Offered intermittently. Instruction in the prevention, recognition, and treatment of backcountry illness and injury. Successful students receive an Aerie Wilderness First Responder certification and an American Heart Association Heartsaver CPR certification. This course meets HHP department First Aid requirement but does not meet the CPR requirement.

ECP 130 - Emergency Medical Technician. 5 Credits.

The purpose of this Emergency Medical Technician (EMT) course is to provide students with an academic working knowledge and skills to become state certified and Nationally Registered EMT. It provides the basic concepts of emergency care, and basic life support which are needed to function as an EMT.

ECP 191 - Special Topics. 1-6 Credits.

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

ECP 200 - Transition to Paramedic Care. 3 Credits.

Offered autumn at Missoula College and Missoula Emergency Services. Provides an opportunity to start learning the cognitive, psychomotor and behavioral differences between an EMT and Paramedic. Topics covered include roles and responsibilities of the paramedic, EMS systems, Licensure/recertification requirements, Medical legal, patient evaluation, radio communications, documentation, and current issues that impact EMS profession.

ECP 201 - Paramedic Fundamentals. 3 Credits.

Offered autumn at Missoula College and Missoula Emergency Services. Requires completion of all program pre-requisites and admission to program. Prepares the paramedic student in the basic knowledge and skills needed in the pre-hospital environment. Topics covered include roles and responsibilities of the paramedic, medical legal considerations, communications, rescue and disaster operations, initial patient assessment and management, airway management and ventilation, pathophysiology of shock, and emergency pharmacology.

ECP 202 - Paramedic Fundamentals Lab. 1 Credit.

Offered autumn at Missoula College and Missoula Emergency Services. Practices and gains the manipulative skills necessary to effectively manage the tasks in ECP 201. Completion of pre-requisites and admission to program required.

ECP 206 - EMS Case Studies. 4 Credits.

Offered spring at Missoula College and Missoula Emergency Services.Requires completion of all program pre-requisites and admission to program. Provides an opportunity to study and manage trauma and respiratory emergencies from a case study perspective. Trauma topics covered include shock, head, spinal, thoracic, abdominal, burns, and environmental. Respiratory topics covered include asthma, emphysema, chronic bronchitis, pneumonia, pulmonary edema, and embolism.

ECP 207 - Cardiology. 4 Credits.

Offered autumn at Missoula College and Missoula Emergency Services. Requires completion of all program pre-requisites and admission to program. Provides an in-depth study in the pathophysiology and management of cardiovascular disease and related emergencies. Topics include anatomy and physiology of the heart and circulatory system, basics of electrophysiology, assessment of the cardiac patient, pathophysiology of atherosclerosis, specific conditions resulting from atherosclerotic heart disease, peripheral vascular emergencies, pharmacologic intervention, dysrhythmia recognition, and specific management of cardiac emergencies.

ECP 208 - Cardiology Lab & ACLS. 1 Credit.

Offered autumn at Missoula College and Missoula Emergency Services. Requires completion of all program pre-requisites and admission to program. The student practices and gains manipulative skills to satisfactorily manage the task in ECP 207. Upon completion, the student receives provider certification in Advanced Cardiac Life Support.

ECP 216 - Hospital Clinical I. 5 Credits.

Offered spring at Missoula College and Missoula Emergency Services. Prereq., ECP 200, ECP 201, ECP 202, ECP 207, and ECP 208. Provides the opportunity to apply, in a clinical setting, the didactic knowledge and skills developed in the classroom and lab. Serves as the first stage in assisting the student to become an employable EMS provider. Clinical skills addressed include patient assessment and evaluation, vital signs management, development of airway management skills, autopsy observation, development of communication skills, introduction to various skills necessary for patient care, and development of safety practices.

ECP 220 - Special Considerations. 1 Credit.

Offered spring at Missoula College and Missoula Emergency Services. Prereq., ECP 200, ECP 201, ECP 202, ECP 207, and ECP 208. Provides an opportunity to study and manage behavioral emergencies. Students are taught to recognize symptoms of abnormal behavior and responses. Students learn techniques to manage the suicide patient.

ECP 221 - OB/Neonate/Pediatrics. 2 Credits.

Offered spring at Missoula College and Missoula Emergency Services. Prereq., ECP 200, ECP 201, ECP 202, ECP 207, and ECp 208. Provides the student with the opportunity to participate in normal and abnormal obstetrical problems. Anatomy and physiology of the female reproductive system, assessment of the gynecologic patient, deliveries (normal, abnormal and complicated), routine care of the neonate, care of the distressed infant, neonatal emergencies, and neonatal transport are addressed.

ECP 222 - OB/Neonate/Pediatric Lab/PALS/Stable. 1 Credit.

Offered spring at Missoula College and Missoula Emergency Services. Prereq., ECP 200, ECP 201, ECP 202, ECP 207, and ECP 208. Practices and gains the manipulative skills necessary to effectively manage the tasks in ECP 221. Upon completion, the student receives provider certification in Pediatric Advanced Life Support (PALS).

ECP 230 - Trauma. 2 Credits.

Offered summer at Missoula College and Missoula Emergency Services. Prereq., autumn and spring semesters of program. Provides an intense course in the pathophysiology and the management of trauma to include assessment of the trauma patient, management of head injuries, chest injuries, abdominal injuries, spinal injuries, orthopedic injuries, management of the multi-trauma patient, management of special airway problems, and current trends in trauma management.

ECP 232 - Pulmonary. 2 Credits.

Offered summer at Missoula College and Missoula Emergency Services. Prereq., successful completion of autumn and spring semesters of program. Provides an in-depth study of the anatomy of the respiratory system, its relationship to the other systems of the body, the pathophysiology of diseases of the respiratory system, and treatment modalities of pulmonary disease. Topics included are anatomy of the respiratory system, measurements of pulmonary function, respiration and gas exchange, assessment of the respiratory system, pathophysiology and management of respiratory disorders, and principles and management of acute respiratory insufficiency.

ECP 233 - Trauma/Pulmonary Lab & PHTLS. 1 Credit.

Offered summer at Missoula College and Missoula Emergency Services. Prereq., successful completion of autumn and spring semesters of program. Practices and gains the manipulative skills necessary to effectively manage the tasks in ECP 230 and ECP 232. Upon completion, the student receives provider certification in Pre-Hospital Trauma Life Support.

ECP 242 - Medical Considerations. 2 Credits.

Offered summer at Missoula College and Missoula Emergency Services. Prereq., successful completion of autumn and spring semesters of program. Provides an intense course in the pathophysiology and management of medical emergencies to include endocrine, nervous system, the acute abdomen, anaphylaxis, toxicology and substance abuse, infectious diseases, environmental, geriatric and pediatric emergencies.

ECP 243 - Medical Lab. 1 Credit.

Offered summer at Missoula College and Missoula Emergency Services. Prereq., successful completion of autumn and spring semesters of program. Practices and gains the manipulative skills necessary to effectively manage the tasks in ECP 242 Upon completion, the student receives provider certification in Advanced Medical Life Support.

ECP 246 - Hospital Clinical II. 6 Credits.

Offered summer at Missoula College and Missoula Emergency Services. Prereq., successful completion of autumn and spring semesters of program. A continuation of the clinical skills initiated in ECP 216. Provides the opportunity to apply in the clinical setting, the didactic knowledge and skills developed in the classroom and lab. Serves as a second stage in assisting the student to become an employable EMS provider. Clinical skills addressed include electrocardiology, assessment and management of acute and chronic disease, pediatric advanced life support skills, obstetrical and neonatal care, and behavioral intervention techniques.

ECP 247 - Hospital Clinical III. 6 Credits.

Offered autumn at Missoula College and Missoula Emergency Services. Prereq., successful completion of autumn, spring, and summer semesters of program. A continuation of the clinical skills initiated in ECP 216 and ECP 246. Serves as a final stage in assisting the student to become an employable EMS provider. Cognitive, psychomotor, and affective evaluation skills addressed include patient assessment, history gathering, treatment prioritizing, diagnostic impression, protocol knowledge, written documentation, airway management, fluid/drug management, cardiac management, trauma/medical management, attitude, professionalism, assertiveness.

ECP 250 - NREMT Exam Preparation. 3 Credits.

Offered autumn at Missoula College and Missoula Emergency Services. Prereq., successful completion of autumn, spring, and summer semesters of program. Prepares the paramedic student for the national registry paramedic exam. It is a review of the core curriculum taught throughout 2nd and 3rd semester of the paramedic program.

ECP 251 - NREMT Exam Preparation Lab. 1 Credit.

Offered autumn at Missoula College and Missoula Emergency Services. Prereq., successful completion of autumn, spring, and summer semesters of program. Prepares the paramedic student for the national registry paramedic exam. It is a review of the psychomotor skills taught throughout 2nd and 3rd semester of the paramedic program.

ECP 298 - Internship. 8 Credits.

Offered autumn at Missoula College and Missoula Emergency Services. Prereq., successful completion of autumn, spring, and summer semesters of program. Provides the opportunity to apply in the clinical setting, the didactic knowledge and skills developed in the classroom and lab. It serves as the final stage in assisting the student to become an employable EMS provider. Cognitive, psychomotor, and affective evaluation skills addressed include patient assessment, history gathering, treatment prioritizing, diagnostic impression, protocol knowledge, radio communication, written documentation, airway management, fluid/drug management, cardiac management, trauma/medical management, attitude, professionalism, assertiveness, team leader qualities.

ECP 331 - Wilderness EMT. 3 Credits.

Offered intermittently. EMT-Basic curriculum with significantly more detail concerning care for patients in remote settings. Students must be 18 year old and never been convicted of a felony to qualify for certification. This course meets HHP department First Aid and CPR graduation requirements.

ECP 332 - EMT and Incident Management. 5 Credits.

This course follows the DOT?s National Registry of EMTs (NREMT) curriculum and is approved by the NREMT and the State of Montana Board of Medical Examiners. Incident management training includes mass-casualty incidents, extended rescue and evacuation scenarios. Clinical experience includes a two day health clinic in Costa Rica, ambulance and hospital emergency department clinical observations in Montana. Co-requisite courses PTRM 391 Wilderness Rescue and Survival Skills; PTRM 391 Wilderness Medicine and Risk Management.

English - English Teaching (ENT)

ENT 099 - Developmental. 1-99.99 Credits.

ENT 199 - Lower-Division Elective. 1-99.99 Credits.

ENT 296 - Independent Study. 1-3 Credits.

(R-9) Offered every term. Prereq., consent of instr. and department chair. Special projects in English teaching. Only one 296 may be taken per semester. Course Attributes: English Course.

ENT 298 - Internship. 1-3 Credits.

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.

ENT 395 - Special Topics. 1-9 Credits.

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

ENT 398 - Internship. 1-3 Credits.

Offered every term. Prereq., consent of faculty supervisor, department chair, and the Internship Services office. Extended classroom experience which provides practical application of classroom learning during placements on and off campus. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation.

ENT 399 - Upper-Division Elective. 1-99.99 Credits.

ENT 439 - Studies in Young Adult Lit. 3 Credits.

Offered autumn. Reading of representative texts covering the history, genres, authors, and themes of literature for students in middle school and high school. Emphasis on literature circles, large and small group activities, integrated language arts strategies, author study, censorship, and text sets. Required of students pursuing secondary English major and minor teaching certificates.

ENT 440 - Teaching Writing. 3 Credits.

Offered autumn and spring. Prereq. or coreq., EDU 202. 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 licenses.

ENT 441 - Tchg Rdng & Literature. 3 Credits.

Offered autumn and spring. Prereq. or Coreq., ENT 439, EDU 395. 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 licenses.

ENT 442 - Tchg Oral Lang & Media Lit. 3 Credits.

Offered autumn and spring. Prereq. or coreq., LING 465, LING 270, LING 470, or EDU 395. Emphasis on preparation, implementation, and evaluation of teaching strategies and materials in grades 5-12. Includes learning objectives, teaching and learning 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. Required of students pursuing secondary English major and minor teaching licenses.

ENT 495 - Special Topics. 1-6 Credits.

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

ENT 496 - Independent Study. 1-3 Credits.

(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.

ENT 498 - Internship. 1-3 Credits.

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.

ENT 543 - Adv Tchg Strat Yng Adv Lit. 3 Credits.

Offered intermittently. 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

ENT 544 - Creative Drama English Class. 3 Credits.

Offered intermittently. Designing, teaching and evaluating creative drama in the English language arts classroom. Emphasis on using creative drama as a learning strategy to teach literature, language, and all the language arts. Level: Graduate

ENT 545 - Theor/Pedagog of Literacy. 3 Credits.

Offered intermittently. Exploration of contemporary theories and effective strategies for teaching reading, literacy grades 5-16. Level: Graduate

ENT 547 - Adv Tchg Strat Wrtg & Rdg. 3 Credits.

Offered intermittently. 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

ENT 548 - Portfolios and Assessment. 3 Credits.

Offered intermittently. Selecting, designing, and evaluating informal and formal assessments in English Language Arts. Exploration of portfolios as assessment strategies that align curriculum and instruction with standards. Focus on content and performance standards, evaluation criteria and rubrics, and role of reflection in teaching and learning. Level: Graduate

ENT 550 - Montana Writing Project. 2-9 Credits.

(R-9) Offered summer. Prereq., special application and consent of director. Intensive program designed to increase the effectiveness of the teaching and learning of writing in all levels of education. For graduate students, K-12, and university level educators. Level: Graduate

ENT 552 - MWP Leadership Training. 2-9 Credits.

(R-9) Offered summer. Prereq., special application and consent of director. Intensive leadership training for Montana Writing Project teacher-consultants in organizing professional development institutes, developing curriculum, and designing assessments that increases the effectiveness of teaching and learning of writing in all levels of education, pre-K-20. Level: Graduate

ENT 557 - The Holocaust and IEFA. 3 Credits.

Offered intermittently. Prereq., special application and 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 to examine curricula and pedagogies for linking Holocaust Education and Indian Education for All through writing and literacy education. Level: Graduate

ENT 593 - Professional Paper. 1-4 Credits.

(R-4) Offered every term. Prereq., consent of instr. In-house Professional paper for the Master of Arts in English (Teacher Option). Credit not allowed toward any other degree. Level: Graduate

ENT 595 - Special Topics. 1-9 Credits.

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

ENT 596 - Graduate Independent Study. 1-9 Credits.

(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

ENT 598 - Internship. 1-3 Credits.

(R-9) Offered every term. Prereq., consent of faculty supervisor, department chair, and the Internship Services office. Extended classroom experience which provides practical application of classroom learning during placements on and off campus. Level: Graduate

English - Literature (LIT)

LIT 110L - Intro to Lit. 3 Credits.

Offered every term. Offered on Mountain Campus and at Missoula College. Prereq., WRIT 101 (or higher) or equivalent. 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.

Gen Ed Attributes: Lit & Artistic Studies (L), Writing Course-Intermediate

LIT 120L - Poetry. 3 Credits.

Offered every term. Offered on Mountain Campus and at Missoula College. Prereq., WRIT 101 (or higher) or equivalent. An introduction to the techniques of reading and writing about poetry with emphasis on the lyric and other shorter forms.

Gen Ed Attributes: Lit & Artistic Studies (L), Writing Course-Intermediate

LIT 191 - Special Topics. 1-6 Credits.

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

LIT 202L - The Environmental Imagination. 3 Credits.

Offered once a year. Prereq., WRIT 101 (or higher) or equivalent. 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.

Gen Ed Attributes: Lit & Artistic Studies (L), Writing Course-Intermediate

LIT 236L - Literary Histories. 3 Credits.

Offered every term. Prereq., WRIT 101 (or higher) or equivalent. Introduction to the study of literary works in an historical context or a sequence of historical contexts.

Gen Ed Attributes: Lit & Artistic Studies (L), Writing Course-Intermediate

LIT 246L - Genres, Themes, Approaches. 3 Credits.

Offered every term. Prereq., WRIT 101 (or higher) or equivalent. Introduction to the study of literary works in terms of genres and broad themes.

Gen Ed Attributes: Lit & Artistic Studies (L), Writing Course-Intermediate

LIT 280L - Ecology of Literature. 3 Credits.

Prereq., open to students enrolled in the Wilderness & Civilization program for the Wilderness Studies minor. Literary study of nature writing and other genres introducing an ecocritical perspective, with revolving Anglophone texts.

Gen Ed Attributes: Lit & Artistic Studies (L)

LIT 291 - Special Topics. 1-9 Credits.

(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. 3 Credits.

Offered every term. Prereq., WRIT 101 or equivalent, one intermediate writing course, and 6 credits of lower-division LIT or consent of instructor. Study of various literary theories and their application to literary texts.

Gen Ed Attributes: Writing Course-Advanced

LIT 301 - Studies in Literary Forms. 3 Credits.

(R-9) Offered intermittently. Prereq., 6 credits of lower-division LIT or consent of instructor. 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).

LIT 304 - U.S. Writers of Color. 3 Credits.

Offered intermittently. Prereq., WRIT 101 or equivalent, one intermediate writing course and 6 credits of lower-division LIT or consent of instructor. Selected readings from African American, Asian American, Chicano/a, Latino/a, and Native American literatures.

Gen Ed Attributes: Writing Course-Advanced

LIT 305 - Lit by & About Native Amer. 3 Credits.

Offered autumn. Prereq., 3credits 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.

LIT 314 - The American Novel. 3 Credits.

Offered intermittently. Prereq., WRIT 101 or equivalent, one intermediate writing course and 6 credits of lower-division LIT or consent of instructor. 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.

Gen Ed Attributes: Writing Course-Advanced

LIT 315 - Voices of the Am Renaissance. 3 Credits.

Offered intermittently. Prereq., 6 credits of lower-division LIT or consent of instructor. 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.

LIT 327 - Shakespeare. 3 Credits.

Offered autumn and spring. Prereq., WRIT 101 or equivalent, and one intermediate writing course. A survey of selected Shakespeare plays emphasizing close reading of the texts and consideration of their dramatic possibilities.

Gen Ed Attributes: Writing Course-Advanced

LIT 331 - Major Author/s. 3 Credits.

(R-9) Offered intermittently. Prereq., 6 credits of lower-division LIT or consent of instructor. 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).

LIT 342 - Montana Writers. 3 Credits.

Offered intermittently. Prereq., WRIT 101 or equivalent, one intermediate writing course and 6 credits of lower-division LIT or consent of instructor. 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.

Gen Ed Attributes: Writing Course-Advanced

LIT 343 - African American Lit. 3 Credits.

Offered intermittently. Prereq., 6 credits of lower-division LIT or consent of instructor. Selected works by African-American authors. Course may define a narrowed focus such as poetry, women writers, etc.

Gen Ed Attributes: Writing Course-Advanced

LIT 344 - Asian American Literature. 3 Credits.

Offered intermittently. Prereq., 6 credits of lower-division LIT or consent of instructor. This course introduces both a variety of writings by Asian North American authors and major critical issues concerning the production and reception of Asian American texts, with an emphasis on the relation between literary forms and the Asian American socio-historical context, and on the historical formation of Asian American identities.

LIT 349L - Medieval Lit. 3 Credits.

Offered alternate years. 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).

Gen Ed Attributes: Lit & Artistic Studies (L)

LIT 350L - Chaucer. 3 Credits.

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.

Gen Ed Attributes: Lit & Artistic Studies (L)

LIT 351 - Donne & His Followers. 3 Credits.

Offered alternate years. Prereq., 6 credits of lower-division LIT or consent of instructor. Close study of John Donne and other early 17th century religious poets within the context of Renaissance intellectual history.

LIT 353L - Milton. 3 Credits.

Offered alternate years. Prereq., WRIT 101 or equivalent, and one intermediate writing course. Selected study of poetry and prose of Milton.

Gen Ed Attributes: Lit & Artistic Studies (L), Writing Course-Advanced

LIT 355 - British Romanticism. 3 Credits.

Offered alternate years. Prereq., 6 credits of lower-division LIT or consent of instructor. 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.

LIT 363 - Modern Poetry. 3 Credits.

Offered alternate years. Prereq., 6 credits of lower-division LIT or consent of instructor. Survey of modern poetry in English beginning with Emily Dickinson and Walt Whitman and moving toward the present, centering on modernist poets.

LIT 369 - Short Fiction. 3 Credits.

Offered intermittently. Prereq., 6 credits of lower-division LIT or consent of instructor. Study of selected short stories and novellas from mid-19th century to the present.

LIT 370 - Science Fiction. 3 Credits.

Offered intermittently. Study of the science fiction genre from its pulp magazine beginnings in the 1920s to the present.

LIT 373 - Lit & Environment. 3 Credits.

Offered autumn. Prereq., 6 credits of lower-division LIT or consent of instructor. Study of major texts and issues in American nature writing.

LIT 376 - Lit & Other Disciplines. 3 Credits.

(R-9) Offered intermittently. Prereq., WRIT 101 or equivalent, one intermediate writing course and 6 credits of lower-division LIT or consent of instructor. 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).

Gen Ed Attributes: Writing Course-Advanced

LIT 378L - Gay and Lesbian Studies. 3 Credits.

Offered alternate years. Prereq., 6 credits of lower-division LIT or consent of instructor. View 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.

Gen Ed Attributes: Lit & Artistic Studies (L)

LIT 380 - Literary Approaches to Drama. 3 Credits.

Offered intermittently. This course introduces students to dramatic literature, with an emphasis on dramatic elements and devices, and the continuity in the history/tradition of drama. Topics vary, determined by the instructor's special interests, and might focus on either US, British, or global drama.

LIT 391 - Special Topics. 1-9 Credits.

(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.

LIT 398 - Internship. 1-6 Credits.

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.

LIT 402 - Literature in Place. 3 Credits.

Prereq., LIT 300 and 6 credits of LIT courses numbered 300 or higher or consent of instructor. 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. 3 Credits.

(R-9) Offered autumn or spring. Prereq., LIT 300 and and 6 credits in LIT courses numbered 300 or higher or consent of instructor. 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).

LIT 422 - Ecocritical Theory & Practice. 3 Credits.

Prereq., LIT 300 or consent of instructor. 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 430 - Studies in Comparative Lit. 3 Credits.

(R-9) Offered intermittently. 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.

LIT 491 - Special Topics. 1-6 Credits.

(R-6) Offered intermittently. Consent of instructor. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

LIT 492 - Independent Study. 1-3 Credits.

(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.

LIT 494 - Seminar: Lit Capstone. 3 Credits.

(R-9) Offered autumn and spring. Prereq., WRIT 101 or equivalent, one intermediate writing course, LIT 300 and 9 credits in LIT 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.

Gen Ed Attributes: Writing Course-Advanced

LIT 499 - Thesis/capstone: Honors. 1-9 Credits.

(R-9) Offered intermittently. Prereq., consent of chair. Preparation of a thesis or manuscript based on research for presentation and/or publication.

LIT 502 - Special Topics in Ecocriticism. 3 Credits.

(R-9) 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. 3 Credits.

(R-9) Offered every autumn and spring. Prereq., graduate status or consent of instructor. Topics will vary. Level: Graduate

LIT 521 - Sem American Lit. 3 Credits.

(R-9) Offered autumn and spring. Prereq., graduate status or consent of instr. Topics will vary. Level: Graduate

LIT 522 - Sem Comparative Lit. 3 Credits.

(R-9) Offered intermittently. Same as MCLG 522. Prereq., graduate status or consent of instructor. Topics will vary. Level: Graduate

LIT 524 - Nature, Language and Politics. 3 Credits.

(R-9) Offered intermittently. Investigation of environmental, social and political thought from the perspectives of literature and ecocrtical theory. Level: Graduate

LIT 595 - Special Topics. 1-9 Credits.

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

LIT 596 - Graduate Independent Study. 1-9 Credits.

(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

LIT 598 - Internship. 1-9 Credits.

(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

LIT 599 - Thesis. 1-6 Credits.

(R-6) Offered every term. Preparation of a thesis or manuscript based on research for presentation and/or publication. Level: Graduate

English Language Institute (ELI) < University of Montana

English Language Institute (ELI)

ELI 001 - English Language Instruction. 12.000 Credits.

ELI 095 - English Language Instruction. 6.000 Credits.

ELI 096 - English Language Instruction. 6.000 Credits.

ELI 097 - English Language Instruction. 1-6 Credits.

ELI 098 - English Language Instruction. 1-6 Credits.

English as a Second Language (EASL) < University of Montana

English as a Second Language (EASL)

EASL 195 - Special Topics. 1-6 Credits.

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

EASL 250 - Intermediate English for Academic Purposes I: Written Production. 3 Credits.

Offered autumn and spring. Prereq., score 525-549 Paper-Based TOEFL, 70-80 internet-based, 192-212 computer-based, IELTS 6.0; may not be taken at the same time as or after EASL 450 or WRIT 101. Concentration on reading, listening, notetaking, writing and study skills required for success in an American academic setting. Writing focus includes paragraph and essay structure (process & comparison patterns), basic research protocol, grammatical editing and citation. Student Option Grade Mode (traditional or credit/no credit).

EASL 251 - Inter Eng Acad Purposes II: Spoken Production. 3 Credits.

Offered autumn and spring. Prereq., score 525-549 Paper-Based TOEFL, 70-80 internet-based, 192-212 computer-based, IELTS 6.0; may not be taken at the same time as or after EASL 451 or WRIT 101. Concentration on reading, listening, notetaking, speaking and study skills required for success in an American academic setting. Speaking focus includes participating in and leading structured class discussions, and preparing formal presentations with appropriate research and technological support. Student Option Grade Mode (traditional or credit/no credit).

EASL 450 - Adv Eng Acad Purposes I: Written Production. 3 Credits.

Offered autumn and spring. Prereq., score 550-574 Paper-Based TOEFL, 81-91 internet-based, 213-233 computer-based, IELTS 6.5, or EASL 250; may not be taken at the same time as or after WRIT 101. Concentration on reading, listening, notetaking, writing and study skills required for success in an American academic setting. Writing focus includes essay and research paper structure (cause/effect & argumentation patterns), basic research protocol, grammatical editing and citation. Student Option Grade Mode (traditional or credit/no credit).

EASL 451 - Adv Eng Acad Purposes II: Spoken Production. 3 Credits.

Offered autumn and spring. Prereq., score 550-574 Paper-Based TOEFL, 81-91 internet-based, 213-233 computer-based, IELTS 6.5, or EASL 251; may not be taken at the same time as or after WRIT 101. Concentration on reading, listening, notetaking, speaking and study skills required for success in an American academic setting. Speaking focus includes participating in informal and structured debates, leading class discussions, extemporaneous speaking, and preparing formal presentations with appropriate research and technological support. Student Option Grade Mode (traditional or credit/no credit).

Environmental Sciences (ENSC) < University of Montana

Environmental Sciences (ENSC)

ENSC 105N - Environmental Science. 3 Credits.

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.

Gen Ed Attributes: Natural Science Course (N)

ENSC 291 - Special Topics/Experimental Courses. 1-6 Credits.

(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. 3.000 Credits.

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. 1-9 Credits.

(R 12) Offererd 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. 1-6 Credits.

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 470 - Agroecology. 3 Credits.

Offered Intermittently. Offering crucial tools for sustainability and resilience, agroecology is the study of ecological processes applied to food and agricultural systems. Students learn key concepts, scientific findings from the field, and how to apply agroecological principles.

ENSC 491 - Special Topics/Experimental Courses. 1-9 Credits.

(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. 1-6 Credits.

(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. 1-3 Credits.

(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. 1-10 Credits.

Offered autumn. Prereq or coreq ENSC 360. Designing, executing, interpreting and documenting field studies. Project oriented.

ENSC 501 - Scientific Approaches to Environmental Problems. 3 Credits.

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. 3 Credits.

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. 3 Credits.

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. 1-3 Credits.

(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. 1-6 Credits.

(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. 1-15 Credits.

(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. 1-9 Credits.

(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. 1-12 Credits.

(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. 1-12 Credits.

(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. 1-8 Credits.

(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. 1-6 Credits.

(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) < University of Montana

Environmental Studies (ENST)

ENST 191 - Special Topics. 1-9 Credits.

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

ENST 201 - Environmental Info Resources. 3 Credits.

Offered autumn and spring. Prereq., WRIT 101 (or higher) or equivalent. 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.

Gen Ed Attributes: Writing Course-Intermediate

ENST 225S - Sustainable Communities. 3 Credits.

Offered spring. Exploration of ways that communities promote sustainability and environmental health. Introduction of relevant social science concepts.

Gen Ed Attributes: Social Sciences Course (S), Democracy and Citizenship (Y)

ENST 230H - Nature and Society. 3 Credits.

Offered autumn. Offered on Mountain Campus. 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.

Gen Ed Attributes: Historical Studies

ENST 231H - Nature and Society. 3 Credits.

Offered autumn and spring. Offered at Missoula College. Prereq., WRIT 101 (or higher) or equivalent. 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. Gen Ed Attributes: Historical Studies, Writing course-Intermediate

Gen Ed Attributes: Historical Studies, Writing Course-Intermediate

ENST 291 - Special Topics/Experimental Courses. 1-9 Credits.

(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. 1-6 Credits.

(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 310 - Environment Montana: A to Z. 3 Credits.

Offered spring. The environment of Montana has changed dramatically since its founding 150 years ago. The purpose of this course is to provide an introduction to the land, people and places of Montana as viewed through the lens of environmental change. It will explore environmental change in relation to the actions of human beings. It will also explore how federal policies intersect with Montana environmental stories. Through a combination of lectures, readings, focused in-class discussions, and a research project students will learn the environmental stories of Montana.

ENST 320E - Earth Ethics. 3 Credits.

Offered intermittently. Prereq., ENST 230H or PHL 112E or consent of instructor. We often think of environmental issues primarily as issues of science and politics: what does science tell us about problems facing the environment, and how can politics help us respond? But environmental issues are simultaneously ethical issues with several moral dimensions: because each issue raises questions of how we should respond, exploring the moral dimensions of environmental issues can help us to discern better or worse responses, and to understand why we choose to respond as we do. In this course we will develop broad familiarity with different approaches within the field of environmental ethics in order to use a case study approach to examine a range of contemporary environmental issues. Students will have the opportunity to develop their own responses within a moral framework. By the end of the course students will have learned how to examine the moral dimensions of a range of environmental issues and how to ground their own perspectives within an ethical framework.

Gen Ed Attributes: Ethical & Human Values Course

ENST 335L - The Environmental Vision. 3 Credits.

Offered autumn. Prereq., WRIT 101 or equivalent, and one intermediate writing course. 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.

Gen Ed Attributes: Lit & Artistic Studies (L), Writing Course-Advanced

ENST 367 - Environmental Politics & Policies. 3 Credits.

Offered autumn. Prereq., WRIT 101 or equivalent, and one intermediate writing course. 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.

Gen Ed Attributes: Writing Course-Advanced

ENST 373A - Nature Works. 3 Credits.

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.

Gen Ed Attributes: Expressive Arts Course (A)

ENST 382 - Environmental Law. 3 Credits.

Offered spring. Prereq., WRIT 101 or equivalent, and one intermediate writing course. 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.

Gen Ed Attributes: Writing Course-Advanced

ENST 391 - Special Topics/Experimental Courses. 1-12 Credits.

(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. 2-3 Credits.

(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 Swan Valley Connections.

ENST 396 - Supervised Internship (PEAS). 2-10 Credits.

(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.

ENST 398 - Cooperative Education/Intern. 1-6 Credits.

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.

ENST 410 - TEK of Native Peoples. 3 Credits.

Offered autumn. 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. 3 Credits.

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. 3 Credits.

Offered intermittently. 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.

ENST 430 - Culture & Agriculture. 3 Credits.

Offered intermittently. 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. 3 Credits.

Offered intermittently. 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.

ENST 472 - Gen Sci: Conservation Education. 3 Credits.

Offered autumn and spring. Prereq., admission to the Teacher Education Program. A study of the foundations of environmental science and conservation education with applications to community service and teaching.

ENST 476 - Environmental Citizenship. 3 Credits.

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 Justice and Sustainability. 3 Credits.

Offered spring. Seminar course that examines the social justice, economic, and sustainability dimensions of the contemporary food system with a focus on the United States. Develops student understanding of the dominant food system and emerging alternatives.

ENST 487 - Globalization, Justice & Environment. 3 Credits.

Offered autumn. Prereq., WRIT 101 or equivalent, and one intermediate writing course. 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.

Gen Ed Attributes: Writing Course-Advanced

ENST 489S - Environmental Justice Issues & Solutions. 3 Credits.

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.

Gen Ed Attributes: Social Sciences Course (S)

ENST 491 - Special Topics/Experimental Courses. 1-12 Credits.

(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. 1-6 Credits.

(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. 3 Credits.

Offered intermittently. 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.

ENST 494 - Seminar/Workshop. 1-3 Credits.

(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. 3 Credits.

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. 3 Credits.

Offered intermittently. 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. 3 Credits.

Offered intermittently. 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. 3 Credits.

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. 3 Credits.

Offered intermittently. 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

ENST 515 - Environmental Negotiation Mediation. 3 Credits.

Offered intermittently. Same as COMX 515, LAW 519 and NRSM 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. 3 Credits.

Offered intermittently. This courses 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

ENST 519 - Foundations of Change. 3 Credits.

Offered autumn. Prereq., graduate standing in Environmental Studies. Designed for the first-year graduate cohort in Environmental Studies, this foundational course aims to strengthen participants? capacities to effectively meet today?s environmental and social justice challenges. Our incoming cohort (around 20-25 in recent years) includes students from a wide variety of backgrounds. The course provides an introduction to the history and development of the environmental movement(s), as well as a theoretical understanding of democracy, citizenship, power, and social change. Participants will also explore their own sense of personal purpose and develop community. Level: Graduate

ENST 520 - Environmental Organizing. 3 Credits.

Offered intermittently. 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. 3 Credits.

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. 3 Credits.

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. 3 Credits.

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. 3 Credits.

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 - Conservation Without Borders. 3 Credits.

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. Study theory of integration of conservation with management such as common pool resource management, transboundary protected areas and international agreements. Review pertinent literature, interact with stakeholders, and produce group reports. Level: Graduate

ENST 548 - Supervison and Teaching Environmental Education. 3 Credits.

Offered intermittently. Design, selection and evaluation of materials for the teaching of environmental education. Level: Graduate

ENST 555 - Research Methods for Social Change. 3 Credits.

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. 3 Credits.

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. 3 Credits.

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. 3 Credits.

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. 3 Credits.

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. 3 Credits.

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. 3 Credits.

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. 3 Credits.

Offered autumn. 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. 3 Credits.

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. 3 Credits.

(R-4) Offered every semester. Same as NRSM 579 and LAW 679. Prereq., ENST 513, LAW 613, or NRSM 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. 3 Credits.

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. 8.000 Credits.

(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 filed 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

ENST 591 - Special Topics. 1-6 Credits.

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

ENST 593 - Professional Paper. 1-6 Credits.

(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

ENST 594 - Graduate Seminar. 1-15 Credits.

(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. 9.000 Credits.

(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

ENST 596 - Independent Study. 1-12 Credits.

(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

ENST 597 - Research. 1-12 Credits.

(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. 1-8 Credits.

(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

ENST 599 - Thesis. 1-6 Credits.

(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

FacilityManagement Engineering (FME) < University of Montana

FacilityManagement Engineering (FME)

FME 122 - Electricity. 6 Credits.

Offered spring. Offered at Missoula College. 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, raceways and electrical thermostats.

FME 123 - Carpentry. 6 Credits.

Offered autumn. Offered at Missoula College. 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.

FME 127 - High/Low Pressure Boilers. 3 Credits.

Offered autumn. Offered at Missoula College. The fundamentals of high/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. This course allows students to sit for the Third Class Boiler License Exam with 40 hours of hands-on training verses the 960 hours required by the state.

FME 128 - Plumbing & Maintenance. 3 Credits.

Offered autumn. Offered at Missoula College. Maintenance principles pertaining to lawns, groundcovers, trees, swimming pools, and plumbing equipment. Emphasis is placed on safe application of chemicals; maintenance frequency; and the identification and safe uses of associated tools and materials.

FME 130 - Heating & Air Conditioning. 6 Credits.

Offered spring. Offered at Missoula College. Prereq., FME 122. 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. Students will also sit for the Universal 608 EPA exam.

FME 191 - Special Topics. 1-6 Credits.

(R-6) Offered at Missoula College. Experimental offerings of visiting professors, experimental offerings of new courses, or one time offerings of current topics.

FME 192 - Independent Study. 1-6 Credits.

(R-6) Offered at Missoula College. Course material appropriate to the needs and objectives of the individual student.

Film (FILM) < University of Montana

Film (FILM)

FILM 103L - Introduction to Film. 3 Credits.

Offered every term. The history and development of the film medium. Emphasis on critical analysis of selected classic or significant films.

Gen Ed Attributes: Lit & Artistic Studies (L)

FILM 191 - Special Topics. 1-6 Credits.

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

FILM 271L - Film & Literature. 3 Credits.

(R-6) Offered intermittently. Studies of the relationship between film and literature. Topics vary.

Gen Ed Attributes: Lit & Artistic Studies (L)

FILM 291 - Special Topics. 1-6 Credits.

(R-6) Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

FILM 300 - History of Film. 3 Credits.

Offered every year. Prereq., FILM 103L, LIT 270L. Survey of film history.

FILM 308 - Russian Cinema and Culture. 3 Credits.

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.

FILM 320 - Shakespeare and Film. 3 Credits.

Offered once a year. Prereq., WRIT 101 (or higher) or equivalent. A survey of selected Shakespeare plays emphasizing close reading of the texts and consideration of their dramatic possibilities in relation to film.

Gen Ed Attributes: Writing Course-Intermediate

FILM 327 - Film Genres. 3 Credits.

(R-9) Offered every other year. Prereq. FILM 103L. Intensive study of central works within one major film genre.

FILM 363 - The French Cinema. 3 Credits.

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. 3 Credits.

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. 3 Credits.

(R-9) Offered autumn and spring. Prereq., FILM 103L or consent of instr. Studies in genres, directors, movements, problems, etc.

FILM 391 - Special Topics. 1-9 Credits.

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

FILM 392 - Independent Study. 1-6 Credits.

(R-6) Offered Intermittently. Consent of Instructor Required.

FILM 447 - Film Theory. 3 Credits.

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 448 - Documentary: Thry and Practice. 3 Credits.

Offered yearly. Same as MAR 443. 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 work with a team of producers in learning the basic skills involved in documentary production.

FILM 481 - Advanced Studies in Film. 3 Credits.

(R-9) Offered every other year. Studies in film aesthetics, politics of film, international cinema and comparative film analyses.

FILM 484 - Film Directors. 3 Credits.

(R-9) Offered every year. Prereq. FILM 103L. Intensive study of the life and work of one major film director.

FILM 491 - Special Topics. 1-9 Credits.

(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. 1-9 Credits.

(R-9) Offered every term. Pereq., 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. 1-6 Credits.

R-6

FILM 596 - Independent Study. 1-9 Credits.

(R-9) Offered every term. Prereq., consent of instr. and department chair. Special projects in film. Level: Graduate

Fish, Wildlife Science & Management (WILD)

WILD 105N - Wildlife & People. 3 Credits.

Offered autumn. Intended for non-wildlife biology majors. Interactions of wildlife and people in todays society.

Gen Ed Attributes: Natural Science Course (N)

WILD 170 - Fish & Wildlife Interest Group. 1 Credit.

Offered autumn. Discussion section for incoming students.

WILD 180 - Careers in Wildlife Biology. 2 Credits.

Offered autumn and spring. Subject matter and fields of study within wildlife biology conservation and management. Topics to include wildlife ecology, aquatic ecology, human dimensions, conservation and management, and other opportunities for careers in wildlife biology.

WILD 191 - Special Topics. 1-6 Credits.

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

WILD 230 - Conservation Science. 3 Credits.

Prereq., BIOO 105N or BIOO 101N or BIOB 160N or BIOB 170N or BIOE 172N or consent of instructor. The goal of this class is to introduce students to major issues related to the conservation of biodiversity. Lectures will illustrate how science can be used to identify and solve conservation problems. Lectures will cover current threats to biodiversity (human population growth, extinctions, habitat destruction, degradation and fragmentation, overexploitation, invasive species, global climate change) and discuss how science can be used to help ameliorate these impacts.

WILD 240 - Intro to Biostatistics. 3 Credits.

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.

WILD 275 - Wildlife Conservation. 2 Credits.

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. 1-6 Credits.

(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. 3 Credits.

Offered autumn. Prereq., BIOB 272. Only open to Wildlife Biology Majors. 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. 4.000 Credits.

Offered autumn and spring. Prereq., junior/senior standing in wildlife biology, STAT 216 or WILD 240, BIOE 370, or consent of instr. Application of principles of wildlife biology to conservation and management of wild bird and mammal habitats including statistical and field applications.

WILD 374 - Hunter Check Station. 1 Credit.

(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. 1-12 Credits.

(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. 1-6 Credits.

(R-6) Offered every term. Course material appropriate to the needs and objectives of the individual student.

WILD 398 - Internship. 1-6 Credits.

(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.

WILD 408 - Advanced Fisheries. 3 Credits.

Offered spring. Prereq., WRIT 101 or equivalent, one intermediate writing course and BIOO 340. Quantitative analysis and interpretation of fish populations and community data for use in management. Selection, application and evaluation of management techniques.

Gen Ed Attributes: Writing Course-Advanced

WILD 410 - Wildlife Policy & Biopolitics. 3 Credits.

Offered spring, odd years. 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. 2 Credits.

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. 4 Credits.

Offered autumn and spring. Prereq., WRIT 101 or equivalent, one intermediate writing course, BIOE 370, M 162 or M 171, STAT 216 or WILD 240, 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.

Gen Ed Attributes: Writing Course-Advanced

WILD 472 - Wildlife Hand & Chem Immobiliz. 2 Credits.

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. 3 Credits.

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. 3 Credits.

Offered autumn. 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. 1-12 Credits.

(R-12) Offered intermittently. Experimental offerings of visiting professors, new courses, or one-time offerings of current topics.

WILD 492 - Independent Study. 1-10 Credits.

(R-10) Offered every term. Prereq., consent of instr. Original investigations or problems not related to student's thesis.

WILD 494 - Senior Wildlife Seminar. 1 Credit.

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. 1-6 Credits.

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.

WILD 499 - Thesis. 1-3 Credits.

(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. 3 Credits.

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 541 - Research Design Lab. 1 Credit.

(R-3) Coreq., WILD 540. Students will be expected to learn R programming skills, R data management and R graphing functions as well an introduction to statistical analysis in R.

WILD 542 - Statistical Applications in Wildlife Biology. 1-2 Credits.

(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. 1 Credit.

(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 students own thesis research. Level: Graduate

WILD 560 - Landscape Conservation. 3 Credits.

Offered spring. Examination of how various spatial and temporal scales influence wildlife and their habitats. Level: Graduate

WILD 562 - Wildlife Habitat Modeling. 4.000 Credits.

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. 1 Credit.

(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. WILD 562 or equivalent strongly recommended. Level: Graduate

WILD 568 - Topics in Aquatic Ecology. 1 Credit.

(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 571 - Estimation of Demographic Parameters. 4 Credits.

Offered autumn of even years. Examines methods for estimating demographic parameters of wildlife populations including survival, fecundity, abundance, and movement. Considers theory of capture-recapture and count-based modeling. Includes maximum likelihood and Bayesian treatments of the problems.

WILD 594 - Grad Sem Wldlf Biol. 1 Credit.

(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. 1-12 Credits.

(R-20) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one time offerings of current topics. Level: Graduate

WILD 596 - Independent Study. 1-15 Credits.

(R-15) Offered every term. Prereq., graduate standing and consent of instr. Original investigations or problems not related to student's thesis. Level: Graduate

WILD 597 - Research. 1-15 Credits.

(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. 1-15 Credits.

(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. 1-20 Credits.

(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. 1-20 Credits.

(R-20) Offered every term. Prereq., graduate standing in wildlife biology. Preparation of thesis. Level: Graduate

Forestry (FORS)

FORS 130 - Intro Forestry Field Skills. 2 Credits.

Offered autumn. This course is focused on developing introductory forestry field skills through experiential learning at the Colleges 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. 2 Credits.

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. 1-6 Credits.

(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. 1-3 Credits.

(R-3) Offered every term. Prereq., consent of instr. Problems course designed to allow individual research at the undergraduate level.

FORS 201 - Forest Biometrics. 3.000 Credits.

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. 3.000 Credits.

Offered spring. Prereq., M 121 and M 122 or M 151 or M 162 or M 171 or M 172; and either prereq. or coreq. FORS 201 or STAT 216 or SOCI 202 or WILD 240. 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 - Fire Management & Environmental Change. 3 Credits.

Offered Spring. Introduction to wildland fire and its role as a transformative process in the environment. Topics include pyrogeography, fire behavior, fire ecology, fire policy, and fire management. Examines the role of fire in shaping ecological and social systems, with a focus on societal issues of natural resources, human health, land use, climate change, and economics. Provides foundational understanding of first principles. Serves as a stepping off point for further study of fire.

FORS 232 - Forest Insects & Diseases. 2 Credits.

Offered spring. Identification, significance of and remedies for insect infestations and infectious and non-infectious diseases of forests and forest products.

FORS 240 - Tree Biology. 2 Credits.

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. 3.000 Credits.

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. Gen Ed Attributes: Natural Science Lab Course (N)

Gen Ed Attributes: Natural Science Course (N)

FORS 250 - Intro to GIS for Forest Mgt. 3.000 Credits.

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. 1-6 Credits.

(R-6) Offered intermittently. Experimental offerings of visiting professors; new courses or one-time offerings of current topics.

FORS 292 - Independent Study. 1-3 Credits.

(R-3) Offered every term. Prereq., consent of instr. Individual research at the undergraduate level.

FORS 308 - Fire Ecology Field Studies. 3 Credits.

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. 3 Credits.

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. 3 Credits.

Offered spring. Prereq. 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 in relation to the management of forests for timber and other ecosystem services.

FORS 330 - Forest Ecology. 3.000 Credits.

Offered autumn and spring. Prereq., BIOO 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; and either prereq. or coreq. ENSC 245N or NRSM 210N. 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. 3 Credits.

Offered spring. 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 - Fire Ecology. 3 Credits.

Offered autumn. Prereq., one of the following ecology courses (FORS 330 or BIOE 370 or BIOE 342 or NRSM 462), or FORS 230. A detailed analysis of fire ecology in terrestrial ecosystems with a focus on the Rocky Mountains, including fire history, fire effects, landscape patterns, land use legacies, management implications, and current topics. Includes at least one required all-day field trip.

FORS 340 - Forest Product Manufacturing. 3.000 Credits.

Offered autumn. Survey of the manufacture of wood-based products generated from timber harvest. Laboratory exercises focused on hands-on student learning of product manufacture and testing as well as field trips to several wood products manufacturing facilities.

FORS 341 - Timber Harvesting & Roads. 3.000 Credits.

Offered spring. 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. 3 Credits.

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. 3.000 Credits.

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. 3.000 Credits.

Offered autumn. Prereq., FORS 202 or FORS 302 and FORS 241N and either prereq or 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. 3.000 Credits.

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. 3 Credits.

Offered spring. The theory and application of photo- and electro-optical remote sensing for mapping resources and developing information systems.

FORS 391 - Special Topics. 12.000 Credits.

(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. 1-3 Credits.

(R-10) Offered every term. Prereq., consent of instr. Individual study or research problems.

FORS 398 - Internship. 1-6 Credits.

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.

FORS 434 - Advanced Forest Roads. 3 Credits.

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 - Advaced Timber Harvesting. 3 Credits.

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 440 - Forest Stand Management. 3 Credits.

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. 1-3 Credits.

(R-9) Offered every term. 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 481 - Forest Planning. 3 Credits.

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. 1-12 Credits.

(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. 1-3 Credits.

(R-10) Offered every term. Prereq., consent of instr. Individual study or research problems.

FORS 495 - Wildland RxFire Practicum. 3 Credits.

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.

FORS 498 - Internship. 1-6 Credits.

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.

FORS 499 - Senior Thesis. 1-3 Credits.

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. 3 Credits.

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.. 3 Credits.

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 535 - Applied Forest Ecology. 3 Credits.

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.

FORS 538 - Ecological Statistics. 3 Credits.

Offered autumn. Prereq., STAT 451 and STAT 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. 3 Credits.

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.

FORS 544 - Adv. Wildland RXFire Practicum. 3 Credits.

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 FORS 495 Wildland Prescribed Fire Practicum and FORS 544 Prescribed Fire Practicum. Level: Graduate

FORS 545 - Silviculture Research. 1 Credit.

(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. 4 Credits.

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 558 - Landscape Ecology. 3 Credits.

Offered Spring semester even years. Prereq., FORS 538 or equivalent. The purpose of this course is to provide students with an introduction to the discipline of landscape ecology with a focus on applications within ecology and natural resource management. In addition to studying the fundamentals of landscape ecology through reading primary literature, students will gain exposure to a range of tools used in the analysis of geo-spatial data including raster analysis, environmental remote sensing, state transition models and species distribution models. Another objective is to engage students in student-directed learning within an inter-disciplinary environment to improve and refine students oral and written communication skills. Level: Graduate

FORS 594 - Graduate Seminar. 1 Credit.

(R-12). Offered autumn. Prereq. graduate standing. Presentations by students, faculty, and professionals on issues and topics in their field. Level: Graduate

FORS 595 - Special Topics. 1-12 Credits.

(R-12) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. Level: Graduate

FORS 596 - Independent Study. 1-3 Credits.

(R-10) Offered every term. Prereq., consent of instr. Individual study or research problems. Level: Graduate

FORS 598 - Internship. 1-15 Credits.

(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

FORS 599 - Professional Paper. 1-15 Credits.

(R-15) Offered autumn and spring. Preparation of Master of Ecosystem Management professional paper. Level: Graduate

FORS 697 - Graduate Research. 1-15 Credits.

(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. 1-15 Credits.

(R-15) Offered every term. Preparation of thesis/dissertation. Level: Graduate

French (FRCH)

FRCH 101 - Elementary French I. 4 Credits.

Offered autumn. Active skills: listening, speaking, reading and writing plus basic cultural analysis.

FRCH 102 - Elementary French II. 4 Credits.

Prereq., FRCH 101. Offered spring. Continuation of 101.

Gen Ed Attributes: Foreign Language Requirement

FRCH 191 - Special Topics. 1-9 Credits.

(R?9) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one?time offerings of current topics.

FRCH 201 - Intermediate French I. 4 Credits.

Offered autumn. Prereq., FRCH 102 or equiv. Expansion of active skills: listening, speaking, reading, writing plus further cultural analysis.

Gen Ed Attributes: Foreign Language Requirement

FRCH 202 - Intermediate French II. 4 Credits.

Offered spring. Continuation of 201. Prereq., FRCH 201 or equiv.

Gen Ed Attributes: Foreign Language Requirement

FRCH 291 - Special Topics. 1-9 Credits.

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

FRCH 292 - Independent Study. 1-6 Credits.

(R?6) Offered autumn and spring. Course material appropriate to the needs and objectives of the individual student.

FRCH 294 - Seminar/Workshop. 1-6 Credits.

(R-6) Offered intermittently. University omnibus option for independent work. See index.

FRCH 300 - Intro to Literature in French. 3 Credits.

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. 3 Credits.

Prereq., FRCH 202 or equivalent. Advanced grammar review including literary tenses; developmental and written skills in French.

Gen Ed Attributes: Foreign Language Requirement

FRCH 302 - Advanced French Grammar and Oral Expression II. 3 Credits.

Prereq., FRCH 202 or equivalent. Advanced grammar review including literary tenses; developmental and written skills in French.

FRCH 310 - Fr. Lit. Cult. Mid. Age Renass. 3 Credits.

Offered autumn. Prereq., FRCH 202 or equiv. and coreq., FRCH 301. French literature of the Middle Ages and Renaissance with a focus on cultural identity.

FRCH 311 - Fr. Lit. Cult. 17th 18th Cent.. 3 Credits.

Offered spring. French literature of the 17th and 18th centuries within its cultural context.

FRCH 312 - Fr. Lit. Cult. Long 19th Cent.. 3 Credits.

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: French and Francophone Literatures and Cultures of the 20th Century. 3 Credits.

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. 3 Credits.

(R?6) 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.

FRCH 339 - Surv African Cinema. 3 Credits.

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. 3 Credits.

(R-6) Offered spring. Prereq., FRCH 301 or consent of instr. Chronological/topical study of French culture.

FRCH 391 - Special Topics. 1-9 Credits.

(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. 1-3 Credits.

(R?3) Offered autumn and spring. Course material appropriate to the needs and objectives of the individual student.

FRCH 394 - Seminar/Workshop. 1-12 Credits.

FRCH 420 - Studies in French Prose. 3 Credits.

Offered intermittently. Prereq., FRCH 301 and one of 310, 311, 312, or 313 or consent of instructor. Evolution of textuality from the Renaissance to the 20th century: the novel.

FRCH 421 - Adv Stylistics & Oral Arg. 3 Credits.

Prereq., FRCH 301 and one of FRCH 310, 311, 312 or 313 or consent of instructor. Intensive analysis of usage and style in written and oral argumentation at various linguistic levels.

FRCH 430 - Studies in French Drama. 3 Credits.

Offered intermittently. Prereq., FRCH 301 and one of FRCH 310, 311, 312 or 313 or consent of instructor. Evolution of theatre from the Renaissance to the 20th century or performance of a French play in French.

FRCH 440 - Studies in French Poetry. 3 Credits.

Offered intermittently. Prereq., FRCH 301 and one of FRCH 310, 311, 312 or 313 or consent of instructor. Evolution of textuality from the Renaissance to the 20th century: poetry and essays.

FRCH 491 - Special Topics. 1-9 Credits.

(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. 1-6 Credits.

(R-6) Offered autumn and spring. Course material appropriate to the needs and objectives of the individual student.

FRCH 494 - Seminar/Workshop. 1-9 Credits.

(R-9) Offered autumn and spring. Prereq., FRCH 301 and one of FRCH 310, 311, 312 or 313 or consent of instructor. Studies in major authors, periods, genres, and/or cultural studies.

FRCH 594 - Graduate Seminar. 3 Credits.

(R?6) Offered autumn and spring. Prereq., graduate standing. A review and discussion of current research. Topics vary. Level: Graduate

FRCH 595 - Special Topics. 1-6 Credits.

(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

FRCH 596 - Independent Study. 1-6 Credits.

(R?6) Offered intermittently. Prereq., graduate standing. Course material appropriate to the needs and objectives of the individual student. Level: Graduate

FRCH 599 - Professional Paper. 1-6 Credits.

(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. 1-9 Credits.

(R?9) Offered intermittently. Prereq., graduate standing. Preparation of a thesis or manuscript based on research for presentation and/or publication. Level: Graduate

General engineering Core (EGEN) < University of Montana

General engineering Core (EGEN)

EGEN 101 - Intro to Eng Cal & Prob Solv. 3 Credits.

Offered autumn. Prereq. or coreq., M 151, or M 121 and M 122, or M 171 or M 172 or ALEX score of 5, or M03-Maplesoft Calculus score >= 15. 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.

EGEN 201 - Engineering Statics. 3 Credits.

Prereq., PHSX 215N, M 171; prereq., or coreq., M 172. Equilibrium of particles and rigid bodies; addition and resolution of forces, vector algebra, moments and couples, resultants and static equilibrium, equivalent force systems, centroids, center of gravity, free body method of analysis, two and three dimensional equilibrium, trusses, frames, friction, and method of virtual work.

EGEN 202 - Engineering Mechanics - Dynamics. 3 Credits.

Prereq., EGEN 201, M 172. Particle and rigid body kinematics and kinetics; rectilinear, curvilinear, and relative motion, equations of motion, work and energy, impulse and momentum, systems of particles, rotation, rotating axes, rigid body analysis, angular momentum, vibration, and time response.

EGEN 335 - Fluid Mechanics. 3 Credits.

Prereq., EGEN 201, M 311. An introduction to the basic concepts of fluid mechanics including the fundamental properties of fluids, fluid statics, kinematics of fluid motion, and similitude. The conservation of mass, energy, and momentum are introduced with applications to compressible and incompressible fluids. Laminar and turbulent boundary layers are introduced.

Geography (GPHY)

GPHY 111N - Intro to Physical Geography. 3 Credits.

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.

Gen Ed Attributes: Natural Science Course (N)

GPHY 112N - Intro to Phys Geography Lab. 1 Credit.

Offered autumn and spring. Prereq. or coreq., GPHY 111N. 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. Gen Ed Attributes: Natural Science Lab Course (N)

Gen Ed Attributes: Natural Science Course (N)

GPHY 121S - Human Geography. 3 Credits.

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.

Gen Ed Attributes: Social Sciences Course (S), Cultural Intl Diversity (X)

GPHY 141S - Geography of World Regions. 3 Credits.

Offered autumn and/or spring. 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.

Gen Ed Attributes: Social Sciences Course (S), Cultural Intl Diversity (X)

GPHY 144 - Glacier National Park in Winter. 3 Credits.

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 241 - Montana. 3 Credits.

Offered autumn. The physical, cultural, economic, political, and historical geography of the state including Montana?s mountains and the prairies.

GPHY 243 - Africa. 3 Credits.

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. 3 Credits.

Offered intermittently. A survey of the biophysical and cultural geography of Southwest Asia and North Africa. Emphasis on environmental change; prehistory; patterns of cultural and historical change; issues of socio-economic, religious, and political diversity; and the broader political significance of the region.

Gen Ed Attributes: Cultural Intl Diversity (X)

GPHY 284 - Intro to GIS and Cartography. 3.000 Credits.

Offered every term. Basic computer competency required. 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. 1-6 Credits.

(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. 1 Credit.

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. 3 Credits.

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.

Gen Ed Attributes: Natural Science Course (N)

GPHY 314 - Global Mountain Environments. 3 Credits.

Offered autumn odd-numbered years. 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. 3 Credits.

Offered autumn even-numbered years. Prereq., GPHY 111N or GEO 101N. Important landforms and landscapes, their biophysical processes, and their formative elements.

GPHY 323S - Economic Geography of Rural Areas. 3 Credits.

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.

Gen Ed Attributes: Social Sciences Course (S)

GPHY 335 - Water Policy. 3 Credits.

Offered autumn. Prereq., WRIT 101 or equivalent, and one intermediate writing course or consent of instructor. 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.

Gen Ed Attributes: Writing Course-Advanced

GPHY 338 - Mountains and Society. 3 Credits.

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. 3 Credits.

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. 3 Credits.

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). 3 Credits.

(R-9) Offered intermittently. Selected regions will be listed as appropriate in each Class Schedule.

GPHY 348 - Field Studies in Geography. 3 Credits.

(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. 1-3 Credits.

(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. 3 Credits.

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. 1-12 Credits.

(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. 1-9 Credits.

(R-9) Offered every term. Consent of Instructor. Independent study in any subfield of geography.

GPHY 395 - Field Studies. 1-9 Credits.

(R-9) Offered fall and/or spring. Field experience in the region. Includes geographically relevant field courses offered as part of Swan Valley Connections' Landscape 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. 1 Credit.

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. 3 Credits.

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 433 - Community Resilience. 3 Credits.

Offered most springs. Prereq., WRIT 101 or equivalent, and one intermediate writing course. Examines human-environment relations and interactions. Topics include: human geographic perspectives on landscape, cultural ecology, political ecology, community resilience in relation to complex adaptive systems, and planning applications.

Gen Ed Attributes: Writing Course-Advanced

GPHY 434 - Food and Famine. 3 Credits.

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. 3 Credits.

(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 444 - High Asia. 3 Credits.

Offered intermittently. A study of the geography and mountain-society interactions in High Asia. The course includes attention to the theory and methodology of mountain geography, with attention to physical and human systems and their interaction.

GPHY 465 - Planning Principles & Processes. 3 Credits.

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. 3 Credits.

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. 3 Credits.

Offered autumn. 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. To succeed in this course students should have comfort with basic algebra.

GPHY 469 - Planning & Analysis Laboratory. 1 Credit.

Offered autumn. Coreq., GPHY 468. Laboratory to accompany GPHY 468.

GPHY 474 - UAV RS for Freshwater Ecology. 3 Credits.

Offered summer only at the Flathead Lake Biological Station. Prereq., FORS 250 or GPHY 284. This course will introduce students to field-based methods of close-range remote sensing in freshwater ecosystems. Students will gain knowledge of basic spatial analysis through GIS and remote sensing techniques. Students will learn basic applications of UAVs and Acoustic Doppler Profilers, two remote sensing instruments of fast-growing interest in ecological research and application. Students will learn about essentials to operate UAVs and ADPs, initial post-processing of data products and integrating these data into ecological research and application.

GPHY 481 - Advanced Cartographic Design. 3 Credits.

Offered autumn. Prereq., GPHY 284 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. 3 Credits.

Offered intermittently. Prereq., GPHY 284 or Consent of Instructor. Coreq., GPHY 489. Quantitative analysis of spatial data, including techniques for pattern analysis, classification, and interpolation within a GIS environment.

GPHY 485 - Internet GIS. 3 Credits.

Offered intermittently. Prereq., GPHY 284 or FORS 250 or Consent of Instructor. Principles and techniques for distributing GIS and mapping applications through the Internet. Students need to register for a required linked lab section.

GPHY 486 - Transport, Planning & GIS. 2,3 Credits.

Offered intermittently during wintersession (2 credits) or spring semester (3 credits.) 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. To succeed in this course students should have comfort with basic algebra and statistics.

GPHY 487 - Remote Sensing/Raster GIS. 3 Credits.

Offered autumn. Prereq. or coreq., GPHY 284 or FORS 250 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. 3.000 Credits.

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 linked lab section.

GPHY 489 - Cartography/GIS Laboratory. 1 Credit.

(R-4) Offered autumn and spring. Prereq., or coreq., GPHY 482, 486 or 487. Lab to accompany cartography and GIS courses.

GPHY 491 - Special Topics. 9.000 Credits.

(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. 1-9 Credits.

(R-9) Offered every term. Consent of instructor. Independent study in any subfield of geography.

GPHY 497 - Workshop in Teaching Geography. 2-3 Credits.

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. 1-6 Credits.

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.

GPHY 499 - Senior Thesis. 3 Credits.

(R-6) Offered autumn and spring. Prereq., WRIT 101 or equivalent, and one intermediate writing course and 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.

Gen Ed Attributes: Writing Course-Advanced

GPHY 500 - Geography Graduate Colloquium. 1 Credit.

(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 - Research Design in the Geographical Sciences I. 1 Credit.

Offered once a year. To be taken during first semester of graduate studies and in sequence with GPHY 505. Understanding of diverse research approaches in the geographical sciences and development of thesis project. To be taken during first year of graduate studies. Level: Graduate

GPHY 505 - Research Design in Geographical Sciences II. 2 Credits.

Offered once a year. Prereq., or corereq GPHY 504. Preparation of a thesis proposal: research design, data collection, analysis, interpretation, and presentation. Recommended to be taken during the first year of graduate studies. Level: Graduate

GPHY 520 - Seminar Geographical Thought. 3 Credits.

Offered once a year. Geographical ideas, concepts, approaches, and techniques from ancient to modern times. Recommended to be taken during first year of graduate studies. Level: Graduate

GPHY 525 - Advanced Physical Geography. 3 Credits.

(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. 3 Credits.

(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. 3 Credits.

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. 3 Credits.

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. 1-6 Credits.

(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. 3 Credits.

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. 1-3 Credits.

(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. 3 Credits.

(R-9) Offered every two years. Seminar topics in cartography and GIS. Applications to advanced studies in human and physical geography. Level: Graduate

GPHY 587 - Image Analysis & Modeling. 3 Credits.

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. 3 Credits.

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. 1 Credit.

(R-4) Offered autumn and spring. Laboratory to accompany GPHY 587 or 588. Level: Graduate

GPHY 595 - Special Topics. 1-8 Credits.

(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

GPHY 596 - Independent Study. 1-9 Credits.

(R-9) Offered every term. Graduate standing and consent of instructor. Independent research in geography or planning. Level: Graduate

GPHY 597 - Professional Paper. 1-6 Credits.

(R-6) Offered autumn and spring. Graduate standing in Geography and Consent of Advisor. Level: Graduate

GPHY 598 - Internship. 1-9 Credits.

(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

GPHY 599 - Thesis. 1-6 Credits.

Offered every term. Graduate standing in Geography and Consent of Advisor. Level: Graduate

Geoscience (GEO)

GEO 101N - Introduction to Physical Geology. 3 Credits.

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.

Gen Ed Attributes: Natural Science Course (N)

GEO 102N - Introduction to Physical Geology Lab. 1 Credit.

Offered autumn and spring. Prereq. or coreq., GEO 101N. 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. Gen Ed Attributes: Natural Science Lab Course (N)

Gen Ed Attributes: Natural Science Course (N)

GEO 103N - Introduction to Environmental Geology. 3 Credits.

Offered autumn and spring. General principles of environmental geology, including the spatial and temporal frameworks involved, Earth's materials (minerals, rocks, water, air), natural hazards, water and air pollution, energy, water, and soil resources, flooding, coastal erosion, and climate.

Gen Ed Attributes: Natural Science Course (N)

GEO 104N - Introduction to Environmental Geology Laboratory. 1 Credit.

Offered autumn and spring. Prereq. or coreq., GEO 103N. A series of laboratory exercises designed around the investigation of environmental geology problems, including natural hazards, water and air pollution, energy, water, and soil resources, flooding, coastal erosion, and climate. Gen Ed Attributes: Natural Science Lab Course (N)

Gen Ed Attributes: Natural Science Course (N)

GEO 105N - Oceanography. 3 Credits.

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.

Gen Ed Attributes: Natural Science Course (N)

GEO 106N - History of Life. 3 Credits.

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. Gen Ed Attributes: Natural Science Lab Course (N)

Gen Ed Attributes: Natural Science Course (N)

GEO 107N - Natural Disasters. 3 Credits.

Offered intermittently. This course introduces the scientific context and latest research on natural hazards and disasters, including storms, flood, drought, mass wasting (landslides and avalanches), earthquakes and tsunamis, volcanic eruptions, and wildfires.

Gen Ed Attributes: Natural Science Course (N)

GEO 191 - Special Topics. 1-6 Credits.

(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. 1-6 Credits.

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

GEO 211 - Earth's History and Evolution. 4 Credits.

Offered autumn and spring. Prereq., GEO 101N and GEO 102N or GEO 103N and GEO 104N. 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. 4 Credits.

Offered autumn. Prereq., GEO 101N and GEO 102N or GEO 103N and GEO 104N, and CHMY 121N or CHMY 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. 1-6 Credits.

(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. 3 Credits.

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.

Gen Ed Attributes: Ethical & Human Values Course

GEO 305 - Igneous & Metamorph Petrology. 4 Credits.

Offered spring. Prereq., GEO 225. Characteristics, phase relations, and origin of igneous and metamorphic rocks. Classification and interpretation of igneous and metamorphic rocks in hand specimen and thin section. Plate tectonic settings of magmatism and metamorphism.

GEO 309 - Sedimentation/Stratigraphy. 4 Credits.

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. 3 Credits.

Offered spring. Prereq. GEO 101N or GEO 103N or equivalent 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. 4 Credits.

Offered autumn. Prereq., GEO 211, 225. Structures of deformed rocks; mechanical principles; graphical interpretation of structural problems, tectonic principles.

GEO 318 - Climate System Dynamics. 4 Credits.

Offered spring. Prereq., GEO 101N/102N or GEO 103N/104N, GEO 211, M 122 or M 151. An introduction to the processes driving the Earth's climate system using the laws and principles of physics and focused on energy and heat flow to/from and within the earth system. Individual components of the climate system and their couplings and feedbacks are first examined, followed by an integrated view of variability of earth?s energy balance over a range of time scales. The course will combine lectures with data analysis and modeling.

GEO 319 - Surface Processes. 3 Credits.

Offered spring. Prereq. GEO 101N/GEO 102N or GEO 103N/GEO 104N, M 122 or M 151. Study of the earth?s surface and near surface using the laws and principles of physics. Mechanisms underlying the processes that shape the earth?s surface and drive its evolution, including climate, hydrology, geomorphology, and geochemistry.

GEO 320 - Global Water. 4 Credits.

Offered autumn. Prereq., CHMY 121N or CHMY 141N/CHMY 142N, WRIT 101 or equivalent, and one intermediate writing course. 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. The course is evaluated based on discussions, formal and informal writing assignments and a short laboratory experiment. There is a field trip associated with this course. Students will use excel to solve problems and will learn citation conventions relevant for scientific writing.

Gen Ed Attributes: Writing Course-Advanced

GEO 327 - Geochemistry. 4 Credits.

Offered alternate years. Prereq., CHMY 121N or CHMY 141N/ CHMY 142N, M 162 or M 171/M 172, and GEO 101N/GEO 102N or GEO 103N/GEO 104N, or consent of instructor. 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, written assignments, and exams are used to assess student performance. There is a short laboratory exercise associated with this course.

GEO 391 - Special Topics. 1-9 Credits.

(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. 1-6 Credits.

(R-6) Offered every term. Specific topics of particular interest to individual students.

GEO 398 - Internship. 1-6 Credits.

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.

GEO 420 - Hydrogeology. 4 Credits.

Offered spring. Prereq., GEO 101N-GEO 102N or GEO 103N-GEO 104N; PHSX 205N/PHSX 206N or PHSX 215N/PHSX 216N ; M 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. 3 Credits.

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. 3 Credits.

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 439 - Geophysics. 3 Credits.

Prereqs., GEO 101N/ GEO 102N or GEO 103N/GEO 104N, PHSX 207N or PHSX 217N, and M 171, or consent of instructor. We will explore a variety of fundamental topics in geophysics, including Earth formation, Earth structure, plate tectonics, gravity, seismology, heat flow and magnetics. The course will also cover modern geophysical surveying methods, including reflection seismology, refraction seismology, gravity surveying, and magnetic surveying.

GEO 443 - Principles of Sedimentary Petrology. 4 Credits.

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. 4 Credits.

Offered autumn. Prereq., GEO 101N/GEO 102N or GEO 103N/GEO 104N, M 171, PHSX 205N or PHSX 215N, or consent of instructor. Quantitative examination of landforms, runoff generation, weathering, mechanics of soil erosion by water and wind, mass wasting, glacial processes and hillslope evolution.

GEO 482 - Global Change. 3 Credits.

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. 3 Credits.

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. 1-8 Credits.

(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. 1-6 Credits.

(R-6) Offered every term. Specific topics of particular interest to individual students.

GEO 494 - Senior Geology Seminar. 1-10 Credits.

(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. 1-4 Credits.

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.

GEO 499 - Senior Thesis /Capstone. 3-10 Credits.

(R-10) Offered every term. Prereq., 18 credits in geosciences, WRIT 101 or equivalent, and one intermediate writing course. Independent research project in any geosciences topic supervised by faculty member, and leading to completion of baccalaureate degree.

Gen Ed Attributes: Writing Course-Advanced

GEO 508 - Fundamentals of Academic Research. 2 Credits.

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. 4 Credits.

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 540 - The Food-Energy-Water Nexus. 3 Credits.

Offered autumn. Same as NRSM 540. Interdisciplinary course examining interactions between food, energy, and water systems and core concepts and tools at the food-energy-water nexus. Perspectives and connections across scales, sectors, and disciplines (including social and biophysical sciences and engineering) are emphasized. Level: Graduate

GEO 541 - Food-Energ-Water Nexus Field Lab. 2 Credits.

(R-4) Offered spring. Same as NRSM 541. Field-based course connecting theory and practice by examining food-energy-water case studies, conducting interdisciplinary synthesis, and communicating with diverse stakeholders. Combines intermittent in-class meetings and a week-long field trip to regional sites to examine food-energy-water issues on-the-ground and to meet with and learn from producers, managers, policy-makers, and tribal members.

GEO 542 - Food-Energy-Water Seminar. 1 Credit.

(R-4) Offered autumn and spring. Same as NRSM 542. Autumn seminars will focus on building interdisciplinary knowledge of the food-energy-water nexus through presentations from guest speakers, readings, and domestic and international case studies. Spring seminars will focus on building skills for multiple career paths through presentations and guest lectures.

GEO 546 - Seismology and Geodesy. 3 Credits.

Offered Spring. Prereq., PHSX 207N or PHSX 217N or equivalent, M 263 or M 172 or equivalent, and GEO 439 or equivalent, or consent of instructor. We will explore modern topics in geophysics, with a focus on seismology and geodesy. Advanced topics may vary with each offering, but will generally include selections from continuum mechanics, inverse theory, seismic wave propagation, earthquake location, tidal analysis and prediction, GNSS theory and analysis, spheroidal Earth deformation, and surface mass loading. Students will have the opportunity to engage directly with real seismic and geodetic datasets using computational tools, as well as to investigate problems of personal interest through individual research projects. Level: Graduate

GEO 548 - Topics in Cryosphere. 3 Credits.

(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. 3 Credits.

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 572 - Advanced Hydrogeology. 3 Credits.

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 579 - Chemistry of Hot Springs. 3 Credits.

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 582 - Tps Structure & Geophysics. 1-12 Credits.

(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. 1-12 Credits.

(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. 1-12 Credits.

(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 590 - Supervised Internship. 1-12 Credits.

Offered intermittently. Directed individual research and study appropriate to the back ground and objectives of the student. Level: Graduate

GEO 595 - Special Topics. 1-8 Credits.

(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

GEO 597 - Advanced Problems. 1-10 Credits.

(R-10) Offered intermittently. Prereq., consent of instr. Investigations of geological problems exclusive of thesis or dissertation research. Level: Graduate

GEO 599 - Thesis Research. 1-12 Credits.

(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. 1-12 Credits.

(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

German (GRMN) < University of Montana

German (GRMN)

GRMN 101 - Elementary German I. 4 Credits.

Offered autumn. Emphasis on oral communication, with development in all major skill areas: listening, speaking, reading, and writing.

GRMN 102 - Elementary German II. 4 Credits.

Offered spring. Prereq., GRMN 101. Emphasis on oral communication, with continuing development in all major skill areas: listening, speaking, reading, and writing.

Gen Ed Attributes: Foreign Language Requirement

GRMN 106H - Introduction to German Culture and Civilization. 3 Credits.

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 in English. 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.

Gen Ed Attributes: Historical Studies

GRMN 191 - Special Topics. 1-9 Credits.

(R?9) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one?time offerings of current topics.

GRMN 201 - Intermediate German I. 4 Credits.

Offered autumn. Prereq., GRMN 102 or equiv. Continuation of active skills approach to German listening, speaking, reading, and writing.

Gen Ed Attributes: Foreign Language Requirement

GRMN 202 - Intermediate German II. 4 Credits.

Offered spring. Prereq., GRMN 201 or equiv. Continuation of 201.

Gen Ed Attributes: Foreign Language Requirement

GRMN 291 - Special Topics. 1-9 Credits.

(R?9) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one?time offerings of current topics.

GRMN 292 - Independent Study. 1-6 Credits.

(R?6) Offered autumn and spring. Course material appropriate to the needs and objectives of the individual student.

GRMN 301 - German: Oral and Written Expression I. 3 Credits.

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.

Gen Ed Attributes: Foreign Language Requirement

GRMN 302 - German Oral & Written Expresion II. 3 Credits.

Offered spring. Prereq., consent of instructor. Native or near?native speakers of German may not apply credit for this course toward a German major or minor.

Gen Ed Attributes: Foreign Language Requirement

GRMN 305 - Practicum in German Language. 4 Credits.

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 - Introduction to German Literature. 3 Credits.

Offered autumn. Prereq., GRMN 202 or equiv. Reading and discussion of selected works of German literature. Instruction in the fundamentals of textual analysis and terminology and discussion of works in historical context. Taught primarily in German.

GRMN 312 - Introduction to German Literature: Drama/Poetry. 3 Credits.

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 and Austrian Theater.

GRMN 317L - Introduction to Multicultural Literature in Contemporary Germany. 3 Credits.

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.

Gen Ed Attributes: Lit & Artistic Studies (L)

GRMN 322L - Survey of German Cinema. 3 Credits.

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.

Gen Ed Attributes: Lit & Artistic Studies (L)

GRMN 340L - Nature and the Environment in German Literature and Film. 3 Credits.

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.

Gen Ed Attributes: Lit & Artistic Studies (L), Democracy and Citizenship (Y)

GRMN 350 - German Culture & Civilization. 3 Credits.

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. 3 Credits.

Offered intermittently in spring. Prereq., WRIT 101 or equivalent, and one intermediate writing course. Overview of major events and currents in German culture to 1900 with emphasis on the arts, literature, and intellectual movements. Lectures in English.

Gen Ed Attributes: Historical Studies, Writing Course-Advanced, Democracy and Citizenship (Y)

GRMN 352H - Germ Culture: Romanticism to the Present. 3 Credits.

Offered intermittently in spring. Prereq., WRIT 101 or equivalent, and one intermediate writing course. Overview of major events and trends in culture of German-speaking world from 1800 to the present with emphasis on the arts, literature, film, intellectual movements, and social and political developments. Lectures in English.

Gen Ed Attributes: Historical Studies, Writing Course-Advanced, Democracy and Citizenship (Y)

GRMN 391 - Special Topics. 1-9 Credits.

(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. 1-12 Credits.

(R?9) Offered intermittently. Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student.

GRMN 398 - Internship. 1-6 Credits.

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.

GRMN 431 - German Literature 1760-1832. 3 Credits.

Offered autumn. Prereq., consent of instructor. 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. 3 Credits.

Offered autumn. Prereq., consent of instructor. Readings, study, and discussion of writers, texts, and contexts in German literature from 1832 to 1900.

GRMN 451 - 20th Century German Literature to 1945. 3 Credits.

Offered spring. Prereq., GRMN 311 and 312 or consent of instructor. Readings, study, and discussion of writers, text, and contexts in German literature from 1900 to 1945.

GRMN 452 - 20th Century German Literature Since 1945. 3 Credits.

Prereq., GRMN 311 and 312 or consent of instr. Readings, study, and discussion of writers, text, and contexts in German literature from 1945 to 1990.

GRMN 453 - German Literature Since Unification. 3 Credits.

Offered intermittently. Prereq., GRMN 311 and 312 or consent of instructor. An introduction to current literature in Germany that has been produced since the fall of the Berlin wall and the process of unification in 1989/90.

GRMN 491 - Special Topics. 1-9 Credits.

(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. 1-6 Credits.

(R?6) Offered autumn and spring. Course material appropriate to the needs and objectives of the individual student.

GRMN 494 - Seminar in German Studies. 1-12 Credits.

(R-12) Offered autumn. Prereq., GRMN 311 and 312. Advanced studies in major topics in German literature and culture.

GRMN 594 - Graduate Seminar. 3 Credits.

(R?6) Offered intermittently. Prereq., graduate standing. A review and discussion of current research. Topics vary. Level: Graduate

GRMN 595 - Special Topics. 1-6 Credits.

(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

GRMN 596 - Independent Study. 1-6 Credits.

(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 599 - Professional Paper. 1-6 Credits.

(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. 1-6 Credits.

(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. 1-9 Credits.

(R?9) Offered intermittently. Prereq., graduate standing. Preparation of a thesis or manuscript based on research for presentation and/or publication. Level: Graduate

Global Humanities (GH) < University of Montana

Global Humanities (GH)

GH 151L - Introduction to Western Humanities Antiquity. 3 Credits.

Offered autumn. Prereq., WRIT 101 (or higher) or equivalent. Western Civilization in Antiquity - Greek, Roman, Jewish and early Christian literatures.

Gen Ed Attributes: Lit & Artistic Studies (L), Writing Course-Intermediate

GH 152L - Introduction to the Humanities Medieval to Modern. 3 Credits.

Offered Spring. Prereq., WRIT 101 (or higher) or equivalent. Western Civilization in Modernity ? early modern (Renaissance) to twentieth century.

Gen Ed Attributes: Lit & Artistic Studies (L), Writing Course-Intermediate

GH 161H - Asian Humanities. 3 Credits.

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.

Gen Ed Attributes: Historical Studies, Lit & Artistic Studies (L)

GH 191 - Special Topics. 1-9 Credits.

(R?9) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one?time offerings of current topics.

GH 191L - Special Topics. 1-9 Credits.

(R?9) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one?time offerings of current topics.

GH 192 - Independent Study. 1-6 Credits.

(R?9) Offered intermittently. Course material appropriate to the needs and objectives of the individual student.

GH 291 - Special Topics. 1-9 Credits.

(R?9) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one?time offerings of current topics.

GH 292 - Independent Study. 1-9 Credits.

(R?9) Offered intermittently. Course material appropriate to the needs and objectives of the individual student.

GH 294 - Seminar/Workshop. 1-6 Credits.

(R?6) Offered intermittently. A review and discussion of current research. Topics vary.

GH 316E - Talking to God: Bhagavad Gita. 3 Credits.

Offered every year or alternate year. Close reading of the HINDU Scripture, Bhagavad Gita, in translation, examining its ethical, literary, philosophical and religious dimensions, its influence on Western and Indian literary writers and thinkers, and the way Indian and Western commentators have interpreted and used it.

Gen Ed Attributes: Ethical & Human Values Course

GH 326 - Stories East and West. 3 Credits.

Offered intermittently. Comparative study of stories in different genres from Asia and Europe.

GH 327L - Gender & Sexuality in Eng Fict. 3 Credits.

Offered alternate years. Major 20th century novels and short stories written in English by both men and women in different parts of the world, and how these texts explore changing concepts of gender and sexuality. Topics include heterosexuality, homosexuality, bisexuality, transformations, chastity, adultery, ageing, violence, growing up, adolescence and varying definitions of love.

Gen Ed Attributes: Lit & Artistic Studies (L)

GH 328L - Gender Sexuality India. 3 Credits.

Offered intermittently. Examines the changing representation of gender and sexuality in Indian films over the last six decades. India has the largest film industry in the world, and films are the most important cultural unifier in the country. We will look at gender and sexuality in relation to religion, family, and the state, examining women's changing roles, heterosexuality, homosexuality, bisexuality and transgender, patterns of kinship and friendship.

Gen Ed Attributes: Lit & Artistic Studies (L)

GH 329 - Fathers and Daughters in Western Literary Traditions. 3 Credits.

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. Includes discussion of changing patriarchal formations, symbolic and adoptive fatherhood, incestuous rape, homosexuality and role reversals. Texts include Greek tragedy, Shakespeare, romantic poetry, novel, and graphic novel. Both male and female authors.

GH 333 - Life and Times of Gandhi. 3 Credits.

Offered every other autumn. Reflecting upon the life, ideas, work, and legacy of perhaps the single most important figure in India's national freedom movement, and surely one of the most remarkable figures anywhere in the past century, Mohandas K. (?Mahatma?) Gandhi, this course will examine some of Gandhi?s own major writings, as well as different analyses of Gandhianism put forth by various critics inside and outside of India. We will begin with two of Gandhi?s own writings, the autobiographical Story of My Experiments with Truth, and his seminal treatise on politics and civilization, Hind Swaraj. Then, we will investigate a variety of interpretive approaches to his life and work, ranging from the dramatic (Richard Attenborough?s Academy Award winning film ?Gandhi?) and the fictional (Raja Rao?s Kanthapura) to the dramatic-documentarial (?The Making of the Mahatma?) and the social-scientific (Susanne and Lloyd Rudolph?s Gandhi: The Traditional Roots of Charisma). Gandhi?s spiritual life and its place in his politics will also be examined, as will his social activism. Finally, we will consider aspects of Gandhi?s ongoing influence within and without India, such as the impact of his life and teachings on social activists and reformers like Sunderlal Bahugana in India and Martin Luther King, Jr. in America.

GH 351L - Exploring the Humanities. 3 Credits.

(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.

GH 389E - Placebos: The Power of Words. 3 Credits.

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.

Gen Ed Attributes: Ethical & Human Values Course

GH 390 - Undergraduate Research. 1-6 Credits.

(R?6) Offered intermittently. Directed individual research and study appropriate to the back ground and objectives of the student.

GH 391 - Special Topics. 1-9 Credits.

(R?9) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one?time offerings of current topics.

GH 391L - Special Topics. 1-9 Credits.

(R?9) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one?time offerings of current topics.

Gen Ed Attributes: Lit & Artistic Studies (L)

GH 392 - Independent Study. 1-12 Credits.

(R?12) Offered intermittently. Course material appropriate to the needs and objectives of the individual student.

GH 398 - Coop Edcuation/Internship. 1-6 Credits.

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.

GH 415 - Same Sex Unions Literature. 3 Credits.

Offered intermittently. Examines the literary representation of same-sex unions in European and Indian literary traditions.

GH 484 - Novel Ancient and Modern. 3 Credits.

Offered yearly. Two antithetical models for the construction of a novel.

Gen Ed Attributes: Writing Course-Advanced

GH 490 - Undergradaute Research. 1-6 Credits.

(R?6) Offered intermittently. Directed individual research and study appropriate to the background and objectives of the student.

GH 491 - Special Topics. 1-9 Credits.

(R?9) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one?time offerings of current topics.

GH 492 - Independent Study. 1-9 Credits.

(R?9) Offered intermittently. Course material appropriate to the needs and objectives of the individual student.

GH 494 - Seminar/Workshop. 3 Credits.

(R?9) Offered intermittently. Concentrated studies in specific genres and periods.

GH 498 - Coop Education/Internship. 1-6 Credits.

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.

Global Leadership (GBLD) < University of Montana

Global Leadership (GBLD)

GBLD 110 - Global Challenges and Leadership. 1 Credit.

Prereq., admission to the GLI and consent of GLI Director. Introduction to key global challenges, identifying issues inherent in the challenges, and working with others to research and tackle the challenges.

GBLD 194 - Seminar. 3 Credits.

(R-6) Offered autumn. Prereq., students enrolled in the Global Leadership Certificate program. Small seminar-style courses focused on multidisciplinary approaches to new and enduring global challenges that include intercultural or international perspectives taught by UM faculty around campus.

GBLD 220 - Models of Leadership. 2 Credits.

Prereq., admission to the GLI and consent of GLI Director. Exploration of leadership models, how culture influences the effectiveness of those models, and how one's leadership style can best be identified, developed, and put into action.

GBLD 294 - Seminar. 1-6 Credits.

(R-6) Presentations by students, faculty, and professionals on issues and topics in their field.

GBLD 499 - GLI Capstone. 1-2 Credits.

(R-3) Prereq., senior standing and consent of GLI Director; culminating project addressing a global question, to include a written proposal (completed and presented in semester 1) and execution of a project (completed and presented in semester 2).

Global Youth Development (GYD)

GYD 495 - Special Topics. 1-6 Credits.

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

GYD 510 - Intercultural Skills. 3 Credits.

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. 3 Credits.

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. 1-4 Credits.

(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. 1-6 Credits.

(R-6) Offered every term. Directed readings and other individualized study topics guided by faculty. Level: Graduate

GYD 598 - Internship. 1-6 Credits.

(R-6) Offered every term. Introduction to service learning in applied settings, usually local. Level: Graduate

GYD 599 - Professional Projects. 1-2 Credits.

(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. 1-4 Credits.

(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. 1-4 Credits.

(R-4) Offered every term. Supervised intercultural experience through Peace Corps, VISTA, or other organization approved by program faculty. Level: Graduate

GYD 699 - Thesis. 1-2 Credits.

(R-2) Offered every term. Final master's thesis based on research related to internship placement. Level: Graduate

Grad Study-Interdisciplinary (GS) < University of Montana

Grad Study-Interdisciplinary (GS)

GS 594 - Graduate Seminar. 1-6 Credits.

(R-6) Offered intermittently. Prereq., graduate standing or consent of instr. Topics vary. Level: Graduate

GS 599 - Thesis/Professional Paper/Exam. 1-18 Credits.

GS 693 - International Experience. 1-6 Credits.

(R-6) offered intermittently. Field-based, experiential courses that focus on international culture. Level: Graduate

GS 696 - Independent Study. 1-8 Credits.

(R-8) Offered every term. Prereq., consent of instr. Original investigations of problems not part of dissertation. Level: Graduate

GS 697 - Advanced Research. 1-9 Credits.

(R-9) Offered every term. Prereq., consent of instr. Independent research projects other than dissertation. Level: Graduate

GS 699 - Dissertation. 1-18 Credits.

(R-18) Offered every term. Prereq., consent of instr. Doctoral dissertation research activities. Level: Graduate

Graphic Design (GDSN) < University of Montana

Graphic Design (GDSN)

GDSN 149A - Digital Imaging I. 3 Credits.

Offered autumn and spring. Introduction to the fundamentals of digital imaging and composition principles, primarily using Adobe Photoshop. Emphasis on formal 2D design components, typography, and digital compositing. Consideration of historical and contemporary approaches.

Gen Ed Attributes: Expressive Arts Course (A)

GDSN 231 - Graphic Design Applications. 3 Credits.

Offered spring. This course teaches students to plan and execute visual communication according to the needs of audiences in specific contexts. A thorough examination of the principles of design, theories of communication, and strategies for problem solving will be presented.

Greek (GRK) < University of Montana

Greek (GRK)

GRK 101 - Elementary Greek I. 3 Credits.

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.

GRK 102 - Elementary Greek II. 3 Credits.

Offered spring. Prereq., GRK 101 or equivalent. Continuation of 101. Greek grammar, vocabulary, readings of ancient Greek writings with the aid of a lexicon.

Gen Ed Attributes: Foreign Language Requirement

GRK 191 - Special Topics. 1-6 Credits.

(R-6) Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

GRK 201 - Intermediate Greek I. 3 Credits.

Offered autumn. Prereq., GRK 102 or equiv. Attic prose and poetry Plato, Thucydides, Euripides.

Gen Ed Attributes: Foreign Language Requirement

GRK 202 - Intermediate Greek II. 3 Credits.

Offered spring. Prereq., GRK 201 (211) or equiv. Readings from Homer's Iliad and/or Odyssey.

Gen Ed Attributes: Foreign Language Requirement

GRK 292 - Independent Study. 1-6 Credits.

(R?6) Offered autumn and spring. Course material appropriate to the needs and objectives of the individual student.

GRK 300 - Major Greek Writers. 3 Credits.

(R?12) Offered autumn and spring. Prereq., GRK 202 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. 1-9 Credits.

(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. 1-9 Credits.

(R?9) Offered intermittently. Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student.

GRK 492 - Independent Study. 1-9 Credits.

(R?9) Offered intermittently. Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student.

Health (HTH) < University of Montana

Health (HTH)

HTH 110 - Personal Health and Wellness. 3 Credits.

Offered autumn and spring. Focus on health principles and their relevance in contemporary society, the evaluation and application of scientific advances to hypothetical lifestyles, and on contemporary problems in life.

HTH 292 - Independent Study. 1-6 Credits.

(R-6) Offered every term. Prereq., consent of advisor and instr. Course material appropriate to the needs and objectives of the individual student.

HTH 370 - Peer Health Education. 3 Credits.

Offered spring. Introduction to peer health education strategies and techniques. Instruction in the areas of wellness, drug and alcohol abuse prevention, and sexual assault prevention. Students develop and implement a peer health program focused on prevention of major health problems among college students.

HTH 395 - Peer Health Practicum. 1-3 Credits.

(R-6) Offered autumn and spring. Prereq., HTH 370. Practical experience in planning, coordinating, and implementing health education activities for the campus community. Students address topics related to wellness, drug and alcohol prevention, or sexual assault awareness.

HTH 430 - Health and Mind/Body/Spirit. 3 Credits.

Offered autumn. Prereq., junior standing. Overview of how the mind/body/spirit relationship affects health. Examination of current research exploring how thoughts, emotions, attitudes, and beliefs influence and mediate health outcome. Exploration of the theoretical applications of mind/body/spirit in health and healing used in contemporary society.

HTH 465 - Leading Health and, Human Perform Orgs. 3 Credits.

Offered every term. Prereq., KIN 205 and junior standing. Leadership, management, organizational structure assertiveness, conflict management, public relations, decision-making, budget management, and a broad overview of human resource management, all as they relate to health and human performance settings.

HTH 475E - Legal and Ethical Issues Health and Exercise Professions. 3 Credits.

Prereq., upper-division or graduate status. Legal bases for litigation in the health and exercise professions, with emphasis on negligence, liability, and risk identification and risk management. Utilizing the Western ethical traditions, the ethics component examines moral/ethical development through the lifespan via analysis of specific human behaviors.

Gen Ed Attributes: Ethical & Human Values Course

HTH 481 - Teaching HHP. 1-3 Credits.

(R-4) Offered every term. Prereq., consent of instructor. Students assist in the preparation and grading of demonstrations and laboratory assignments, and laboratory instruction of undergraduate students enrolled in HHP laboratory courses. Students are given advanced instruction in principles of the HHP course.

HTH 492 - Independent Study. 1-3 Credits.

(R-6) Offered every term. Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student.

HTH 494 - Seminar. 1 Credit.

(R-2) Offered every semester. Co-req., HTH 395 and CHTH 498. Health Behavior Coach practicum and internship students enrolled in this seminar will have the opportunity to critically analyze their coach/client interactions and to receive feedback from faculty and peers regarding their coaching skills. Students' coaching skills will be enhanced and strengthened through assigned readings and skill building activities. CR/NCR

HTH 498 - Internship. 2-6 Credits.

(R-6) Offered every term. Prereq. all HHP options minimum junior standing and ECP 120/121(or equivalent). Prereqs per option. Exercise Science Applied: KIN 320/321. If internship is coaching or strength & conditioning must also have completed KIN 410 and COA 405. Exercise Science Pre-Professional: KIN 320/321. If internship is cardiac rehab must also have completed KIN 460/483/484. Community Health: CHTH 335. Supervised field experiences with private businesses, public agencies, or institutions. 45 hours of internship site work = 1 credit. A maximum of 6 credits of Internship 498 may count toward graduation. Students should not be registered for more than 14 credits their internship semester.

Health Enhancement (HEE) < University of Montana

Health Enhancement (HEE)

HEE 203 - Professional Activities I. 2 Credits.

Offered Autumn. The instruction of basic skills for tennis, basketball, and Western Swing. Techniques, drills, and strategies will be taught. Demonstration and instruction skills developed. Active participation required.

HEE 204 - Professional Activities II. 2 Credits.

Offered Spring. The instruction of basic skills for soccer, volleyball, and golf. Techniques, drills, and strategies will be taught. Demonstration and instruction skills developed. Active participation required.

HEE 291 - Special Topics. 1-6 Credits.

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

HEE 292 - Independent Study. 1-6 Credits.

(R-6) Offered every term. Prereq., consent of advisor and instr. Course material appropriate to the needs and objectives of the individual student.

HEE 301 - Meth of Secondary HE. 3 Credits.

Offered spring. Prereq., WRIT 101 or equivalent, and one intermediate writing course. Application of educational theory in planning, analyzing, and presenting learning experiences to typical and atypical populations in secondary school physical education for students in grades 7-12. Active participation required.

Gen Ed Attributes: Writing Course-Advanced

HEE 302 - Methods of Instructional Strategies in Elementary PE. 3 Credits.

Offered every term. Prereq. admission into Teacher Education Program in the College of Education. Application of educational theory in planning, analyzing, and presenting learning experiences to typical and atypical populations in elementary school physical education for children in grades K-6. Active participation required.

HEE 330 - Promoting Well-Being in the Classroom P-12. 2 Credits.

This course is designed to increase students awareness of the critical role teachers play in enhancing childrens emotional, social, mental and physical health. In addition, students will be encouraged to explore the influence of family, community, and school environment on the prevention of substance use and abuse and on the well-being of children and adolescents.

HEE 340 - Methods of Health Education. 3 Credits.

Offered autumn even-numbered years. Prereq., admission to the teacher education program. Focus on developing and implementing strategies to teach K-12 health education.

HEE 391 - Special Topics. 1-6 Credits.

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

HEE 490 - Undergraduate Research. 1-3 Credits.

(R-6) Offered every term. Prereq., consent of instr. Directed individual research and study appropriate to the back ground and objectives of the student.

HEE 492 - Independent Study. 1-3 Credits.

(R-6) Offered every term. Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student.

HEE 498 - Internship. 2-6 Credits.

(R-6) Offered every term. Prereq. all HHP options minimum junior standing and ECP 120/121 (or equivalent). Prereqs per option. Exercise Science Applied: KIN 320/321. If internship is coaching or strength & conditioning must also have completed KIN 410 and COA 405. Exercise Science Pre-Professional: KIN 320/321. If internship is cardiac rehab must also have completed KIN 460/483/484. Community Health: CHTH 335. Supervised field experiences with private businesses, public agencies, or institutions. 45 hours of internship site work = 1 credit. A maximum of 6 credits of Internship 498 may count toward graduation. Students should not be registered for more than 14 credits their internship semester.

Health Information Technology (HIT) < University of Montana

Health Information Technology (HIT)

HIT 101 - Intro to Healthcare Informatic. 3 Credits.

Offered spring. Offered at Missoula College. Introduces the discipline of healthcare informatics. An overview of the subject including history, basic knowledge of healthcare informatics and tools as applied in support of healthcare delivery. Students will gain an introductory level about the complexities of health care and how informatics fits within the US Healthcare System.

HIT 265 - Electronic Health Records. 3 Credits.

Offered at Missoula College. Prereq., HIT 101. An introduction to the electronic health record (EHR). Students will study the use of the EHR in improving healthcare quality, accessibility, and cost-effectiveness. EHR implementation and its use within the internal clinical office will be examined. The EHR will be studied in the context of a comprehensive Health Information System (HIS) supporting our society?s interdisciplinary clinical healthcare system.

HIT 291 - Special Topics. 1-6 Credits.

(R-6) Offered intermittently. Offered at Missoula College. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

HIT 292 - Independent Study. 1-6 Credits.

(R-6) Offered intermittently. Offered at Missoula College. Course material appropriate to the needs and objectives of the individual student.

Health and Human Performance (HHP) < University of Montana

Health and Human Performance (HHP)

HHP 172 - CFM Crossfit. 1 Credit.

Offered every term. Students may include up to but not more than 4 credits earned in HHP 100-179 activity courses in the total number of credits required for graduation. Students graded Credit/No Credit based on participation and a strict attendance policy. For a complete list of all classes offered go to the HHP Activity Program website.

HHP 173 - YMCA Classes. 1 Credit.

Offered every term. Students may include up to but not more than 4 credits earned in HHP 100-179 activity courses in the total number of credits required for graduation. Students graded Credit/No Credit based on participation and a strict attendance policy. For a complete list of all classes offered go to the HHP Activity Program website.

HHP 520 - Educational Research. 3 Credits.

Offered every term. Same as C&I and EDLD 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

HHP 523 - Case Studies in Performance Psychology. 3 Credits.

Offered intermittently. Prereq., consent of instr. Through the usage of both real and hypothetical case studies, the course will examine the field of sport/performance psychology and its role in the broader field of sports medicine. Level: Graduate

HHP 524 - Ethics & Human Performance. 3 Credits.

Offered spring, even numbered years. A critical examination of the ethical issues dominating the field of health and human performance and beyond with special emphasis on developing the conceptual frameworks needed to articulate our concerns and engage in meaningful dialogue with others. Level: Graduate

HHP 525 - Advanced Biomechanics. 3 Credits.

This course is focused on developing laboratory skills and an advanced understanding of the quantitative and qualitative basis for human motion. Particular emphasis will be placed on the Newtonian mechanics governing biological motion and the roles of the musculo-skeletal, nervous and cardio-vascular systems during human activity. This integrative approach will be used to quantify and understand motion by, and within, the human body; examples will be drawn from the sub-disciplines of clinical gait analysis, gerontology, sports medicine, biological engineering and performance physiology. The lecture portion of this course is co-convened with KIN425 Biomechanics. Level: Graduate

HHP 528 - Advanced Exercise Prescription. 3 Credits.

Offered spring even years. Prereqs., Graduate status or consent of the instructor. This class presents the principles and practices of advanced athletic performance training in a thorough and useful sequence. Testing and improving power, strength, speed, quickness, coordination, agility, flexibility, local muscular endurance, and cardiovascular aerobic capacity and endurance are covered based on the scientific record. Students will learn how to tailor sport specific training exercises and drills and periodize the training program precisely for peak performance at critical points in the competitive season. Level: Graduate

HHP 529 - Advanced Exercise Physiology I. 3 Credits.

Offered autumn. Prereq., HHP 377, 378 or equiv. Advanced study of the effect of work, activity and exercise on human biochemistry, metabolism, endocrinology and muscle function. Level: Graduate

HHP 530 - Advanced Exercise Physiology II. 3 Credits.

Offered spring odd years. Prereq., HHP 529 or equiv. Advanced study of system physiology (circulatory, respiratory and renal function) and environmental factors applied to physical work, activity and exercise Level: Graduate

HHP 531 - Lab Procedures In Exercise Science. 3 Credits.

Offered autumn. Introduction to common laboratory tools associated with clinical and health assessment techniques, research measures, and data collection. Level: Graduate

HHP 540 - Community Health Promotion Strategies. 3 Credits.

Offered autumn even-numbered years. Exploration of the role of the health professional in the development and implementation of educational, organizational, economic, and/or environmental strategies that promote individual and community health. Level: Graduate

HHP 541 - Program Planning in Community Health. 4 Credits.

Prereq. HHP 540. Overview of the issues, approaches, and techniques community health educators and professionals utilize in planning and implementing programs to assist communities in improving health status and reducing risky behaviors and their determinants. Application of program planning research methods including needs analyses, data collection, theory application, strategy development, and evaluation. This course co-convenes with CHTH 445. Level: Graduate

HHP 542 - Advanced Study Mind/Body/Spirit. 3 Credits.

This course is a comprehensive exploration of the body, mind and spirit relationship. An in-depth examination of the concepts, theoretical application, and research of the mind/body/spirit relationship will be applied to health, prevention of disease, and healing used in contemporary society. Conventional thinking will be stretched & challenged as diverse M/B/S ideas, constructs and paradigms will be considered & discussed. Level: Graduate

HHP 544 - Community-Based Participatory Research Methods for Health. 3 Credits.

Offered autumn even years. Instruction will present the principles and practice of community-based participatory research methods (CBPR) and mixed-methods approachs that offers strategies for studying and addressing health and social problems. Level: Graduate

HHP 594 - Seminar. 1-3 Credits.

(R-6) Offered spring. Prereq., consent of instr. A review and discussion of current research. Topics vary. Level: Graduate

HHP 595 - Special Topics. 1-6 Credits.

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

HHP 596 - Independent Study. 1-6 Credits.

(R-6) Offered every term. Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student. Level: Graduate

HHP 597 - Research. 1-6 Credits.

(R-6) Offered every term. Prereq., HHP 486, 520. Directed individual research and study appropriate to the back ground and objectives of the student. Level: Graduate

HHP 598 - Internship. 1-4 Credits.

(R-4) Offered every term. Prereq., current First Aid and CPR certification. Consent of advisor and instructor. Community Health prereq HHP 540, HHP 544. Supervised field work in public and private agencies and institutions. 45 hours of internship site work = 1 credit. Level: Graduate

HHP 599 - Professional Paper. 1-3 Credits.

(R-3) Offered every term. Prereq., HHP 486, 520. Preparation of a professional paper appropriate to the needs and objectives of the individual student. Level: Graduate

HHP 699 - Thesis. 1-6 Credits.

(R-6) Offered every term. Preparation of a thesis or manuscript based on research for presentation and/or publication. Level: Graduate

Heavy Equipment Operation (HEO) < University of Montana

Heavy Equipment Operation (HEO)

HEO 146 - Safety & Basic Controls. 5 Credits.

Offered autumn. Offered at Missoula College. 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. 5 Credits.

Offered autumn. Offered at Missoula College. 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. 6 Credits.

Offered spring. Offered at Missoula College. Prereq., HEO 146 and HEO 148. 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. 2 Credits.

Offered autumn. Offered at Missoula College. 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.. 5 Credits.

Offered spring. Offered at Missoula College. Prereq., M 111 and HEO 148. Study of construction principles, specialized equipment, production estimates, and various related subjects.

HEO 191 - Special Topics. 1-6 Credits.

(R-6) Offered at Missoula College. Experimental offerings of visiting professors, experimental offerings of new courses, or one time offerings of current topics.

HEO 192 - Independent Study. 1-6 Credits.

Offered at Missoula College. Course material appropriate to the needs and objectives of the individual student.

Historic Preservation (HPRV) < University of Montana

Historic Preservation (HPRV)

HPRV 400 - Historic Preservation. 3 Credits.

Offered spring even-numbered years. 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.

History: American (HSTA)

HSTA 101H - American History I. 4.000 Credits.

(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.

Gen Ed Attributes: Historical Studies, Democracy and Citizenship (Y)

HSTA 102H - American History II. 4.000 Credits.

(AM) Offered spring. A comprehensive introductory history of the U.S. since 1877. Lecture-discussion. Credit not allowed for both HSTA 102H and 104H.

Gen Ed Attributes: Historical Studies, Democracy and Citizenship (Y)

HSTA 103H - Honors American History I. 4 Credits.

(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.

Gen Ed Attributes: Historical Studies, Democracy and Citizenship (Y)

HSTA 104H - Honors American History II. 4 Credits.

(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 HSTA 102H and 104H.

Gen Ed Attributes: Historical Studies, Democracy and Citizenship (Y)

HSTA 150H - The Veteran's Experience. 3 Credits.

Offered autumn and spring. Offered at Missoula College. Interdisciplinary, historical perspective of the veteran?s experience in American history, since antiquity. and in American society today. Examines the nature of military service, experiences of war, and consequences of service and war on veterans and their families through the study of sources from history, classical literature, literature, philosophy, and ethics.

Gen Ed Attributes: Historical Studies, Democracy and Citizenship (Y)

HSTA 191 - Special Topics. 1-6 Credits.

(R-6) Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

HSTA 198 - Internship. 1-6 Credits.

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. 3 Credits.

(AM) Offered autumn. An introductory and interpretive history from Lewis and Clark to 2000.

HSTA 262 - Abolitionism. 3 Credits.

(AM) Interdisciplinary, historical perspective on early 19th century movement to abolish slavery and racial discrimination in the United States.

HSTA 291 - Special Topics. 1-12 Credits.

(R-12) (AM) Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

HSTA 315 - Early American Republic. 3 Credits.

(AM) Prereq., WRIT 101 (or higher) or equivalent. Democracy, nationalism and sectionalism, the War of 1812, the second party system, social order and disorder, the capitalist revolution.

Gen Ed Attributes: Writing Course-Intermediate

HSTA 316 - American Civil War Era. 3 Credits.

(AM) Civil War and Reconstruction; the triumph of the industrialist and capitalist ethic.

HSTA 320 - Birth of Modern US. 3 Credits.

(AM) 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. 3 Credits.

(AM) 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. 3 Credits.

(AM) 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. 3 Credits.

(AM) 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. 3 Credits.

(AM) 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 333 - American Military History. 3 Credits.

(R-6) (AM) The French and Indian Wars to Vietnam and beyond; chronological and topical accounts.

HSTA 335 - Movie America. 3 Credits.

(AM) 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. 3 Credits.

(AM) Offered intermittently. 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.

HSTA 343H - Afr Amer Hist Since 1865. 3 Credits.

(AM) 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.

Gen Ed Attributes: Historical Studies

HSTA 344 - African-American Struggle for Equality. 3 Credits.

(AM) A survey of the various efforts by African Americans to achieve racial equality in the United States from the late 19th century through the 1960s.

HSTA 347 - Voodoo, Muslim, Church: Black Religion. 3 Credits.

(AM) Prereq., WRIT 101 (or higher) or equivalent. 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 is the 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.

Gen Ed Attributes: Writing Course-Intermediate

HSTA 361 - The American South. 3 Credits.

(AM) Social history of the American South with particular attention to race, class, and gender.

HSTA 370H - Wmn Amer Colonial to Civil War. 3 Credits.

(AM) Offered autumn. Interpretive overview of major themes and events in U.S. womens history to 1865. Same as WGS 370H.

Gen Ed Attributes: Historical Studies

HSTA 371H - Wmn Amer Civil War to Present. 3 Credits.

(AM) Offered spring. Interpretive overview of major themes and events in U.S. women?s history from 1865 to the present.

Gen Ed Attributes: Historical Studies

HSTA 377 - Alcohol in American History. 3 Credits.

(AM) 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. 3 Credits.

(AM) 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 o frights, industrial capitalism and the welfare state, and majority rule and minority rights in American democracy.

HSTA 382H - History of American Law. 3 Credits.

(AM) Issues in the social history of law from the colonial period to the present.

HSTA 385 - Families & Children in America. 3 Credits.

(AM) Prereq., WRIT 101 (or higher) or equivalent. 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.

Gen Ed Attributes: Writing Course-Intermediate

HSTA 391 - Special Topics. 1-12 Credits.

(R-12) Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

HSTA 415 - The Black Radical Tradition. 3 Credits.

(AM) Offered intermittently. Prereq., WRIT 101 or equivalent, and one intermediate writing course, HSTR 200 and only open to majors and minors in History or African-American Studies or by consent of instructor. 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.

Gen Ed Attributes: Writing Course-Advanced

HSTA 417 - Prayer & Civil Rights. 3 Credits.

(AM) Prereq., WRIT 101 or equivalent, and one intermediate writing course, HSTR 200 and only open to majors and minors in History or African-American Studies or by consent of instructor. 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.

Gen Ed Attributes: Writing Course-Advanced

HSTA 461 - Research in Montana History. 3 Credits.

(AM) Prereq., WRIT 101 or equivalent, and one intermediate writing course, HSTR 200 and 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.

Gen Ed Attributes: Writing Course-Advanced

HSTA 471 - Writing Women's Lives. 3 Credits.

(AM) Prereq., WRIT 101 or HSTR 200 or by consent of the instructor. Upper-division writing-intensive seminar in women?s history. Students will write an original research paper based on primary source materials.

Gen Ed Attributes: Writing Course-Advanced

HSTA 491 - Special topics. 1-12 Credits.

(R-12) Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

HSTA 494 - Seminar. 1-6 Credits.

(R-6) Consent of instructor.

HSTA 501 - Readings in Early Am Hist. 3 Credits.

For students enrolled in History MA or PhD program; or consent of instructor. Graduate readings course in U.S. history covering the period from pre-contact to 1877. Level: Graduate

HSTA 502 - Readings in Modern Am Hist. 3 Credits.

Graduate readings course in U.S. history covering the period from 1877 to the present. Level: Graduate

HSTA 551 - The Early American Republic. 3 Credits.

For students enrolled in History MA or PhD program; or consent of instructor. Intensive reading. Level: Graduate

HSTA 553 - Modern America. 3 Credits.

Intensive reading. Level: Graduate

HSTA 566 - The American West. 3 Credits.

Intensive reading. Level: Graduate

HSTA 570 - U.S. Women's History. 3 Credits.

Intensive readings. Level: Graduate

HSTA 577 - Law, Capitalism, and Democracy in U.S. History. 3 Credits.

For students enrolled in History MA or PhD program; or consent of instructor. This graduate colloquium introduces students to the scholarly literatures of three broad and overlapping fields: U.S. legal history and the history of the American state; the history of American capitalism; and the history of American democracy. Students will interrogate classic scholarship and gain a strong understanding of the current state of scholarly conversations in these fields. Level: Graduate.

HSTA 594 - Seminar. 1-12 Credits.

(R-12) Prereq., 27 credits in history. Directed research. Level: Graduate

HSTA 595 - Special Topics. 9.000 Credits.

(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. 1-12 Credits.

(R-12) Course material appropriate to the needs and objectives of the individual student. Level: Graduate

HSTA 597 - Independent Study. 1-9 Credits.

(R-9) Directed individual research and study appropriate to the back ground and objectives of the student. Level: Graduate

HSTA 598 - Internship. 1-8 Credits.

(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. 1-6 Credits.

(R-6) Preparation of a professional paper appropriate to the needs and objectives of the individual student. Level: Graduate

HSTA 699 - Thesis/Dissertation. 1-6 Credits.

(R-6) Preparation of a thesis or manuscript based on research for presentation and/or publication. Level: Graduate

History: World (HSTR)

HSTR 101H - Western Civilization I. 4.000 Credits.

(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.

Gen Ed Attributes: Historical Studies, Democracy and Citizenship (Y)

HSTR 102H - Western Civilization II. 4.000 Credits.

(EU) Offered spring. A comprehensive, introductory history of western civilization from 1648 to the present. Lecture-discussion. Credit not allowed for both HSTR 102H and 104H.

Gen Ed Attributes: Historical Studies, Democracy and Citizenship (Y)

HSTR 103H - Honors Western Civilization I. 4 Credits.

(EU) Offered autumn. A comprehensive, introductory history of western civilization from classical antiquity to 1648. Lecture-honors discussion. Credit not allowed for both 103H and 101H.

Gen Ed Attributes: Historical Studies, Democracy and Citizenship (Y)

HSTR 104H - Honors Western Civilization II. 4 Credits.

(EU) Offered spring. A comprehensive introductory history of western civilization from 1648 to the present. Lecture-honors discussion. Credit not allowed for both HSTR 102H and 104H.

Gen Ed Attributes: Historical Studies, Democracy and Citizenship (Y)

HSTR 191 - Special Topics. 1-6 Credits.

(R-6) Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

HSTR 198 - Cooperative Educ/Internship I,. 1-6 Credits.

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.

HSTR 200 - Intro: Historical Methods. 1 Credit.

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. 3 Credits.

(WRLD) Latin America from conquest by Spain and Portugal to wars for independence. Focus on social relations, imperial and local politics, hegemony, resistance, and change.

Gen Ed Attributes: Historical Studies, Cultural Intl Diversity (X)

HSTR 231H - Modern Latin America. 3 Credits.

(WRLD) Offered spring. Latin America from wars of independence to the present. Focus on social relations, development models, politics, and popular movements.

Gen Ed Attributes: Historical Studies, Cultural Intl Diversity (X)

HSTR 240H - East Asian Civilizations. 3 Credits.

(WRLD) Offered autumn. 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.

Gen Ed Attributes: Cultural Intl Diversity (X)

HSTR 262H - Islamic Civil: Classical Age. 3 Credits.

(WRLD) 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.

Gen Ed Attributes: Historical Studies

HSTR 264H - Islamic Civ: Modrn Era. 3 Credits.

(WRLD) A concise history of the Islamic world from the 13th century to present.

Gen Ed Attributes: Historical Studies

HSTR 272E - Terrorism:Viol Mod Wrld. 3 Credits.

(WRLD) The rise and spread of terrorism in the modern world, from the French Revolution to the present.

Gen Ed Attributes: Ethical & Human Values Course

HSTR 291 - Special Topics. 1-12 Credits.

(R-12) Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

HSTR 291H - Special Topics. 1-12 Credits.

(R-12) Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

Gen Ed Attributes: Historical Studies

HSTR 300 - Writing For History. 3 Credits.

Prereq., WRIT 101 (or higher) or equivalent. 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.

Gen Ed Attributes: Writing Course-Intermediate

HSTR 301X - Ancient Greek Social History. 3 Credits.

(EU) Various aspects of personal, social, and political life of classical times in Greece. Primary readings in various ancient authors supplemented by some audio-visual or other informational presentations.

Gen Ed Attributes: Historical Studies, Cultural Intl Diversity (X)

HSTR 302H - Ancient Greece. 3 Credits.

(EU) Greek history from the earliest times through the Macedonian ascendancy, based on the writings of the Greek historians.

Gen Ed Attributes: Historical Studies

HSTR 304H - Ancient Rome. 3 Credits.

(EU) Roman history from the time of the Kings through the early Empire. Based on the writings of the Roman historians.

HSTR 312 - Age of Absolut 1648-1789. 3 Credits.

(EU) The political, economic, intellectual, and social development of Europe 1648-1789.

HSTR 315 - Reformation. 3 Credits.

(EU) This course covers Europe's "long Reformation," beginning with efforts toward reform in late medieval Latin Christendom, discussing Luther, Calvin, and other major reformers and movements, popular religion, witchcraft, the age of religious wars, and the legacy of reformation, continuing into contemporary society.

HSTR 323 - European Social and Intellectual History: The 19th Century. 3 Credits.

(EU) Romanticism, Realism, and the Avant-Garde against the historical background of the Industrial Revolution and urbanization.

HSTR 325 - European Social and Intellectual History: The 20th Century. 3 Credits.

(EU) The triumph of the Avant-Garde and the decline of traditional culture: 1914-1945.

HSTR 326 - Contemporary Europe. 3 Credits.

(EU) European politics, culture, and society since 1945.

HSTR 334 - Latin America: Reform & Revolution. 3 Credits.

(WRLD) Prereq., WRIT 101 (or higher) or equivalent. 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.

Gen Ed Attributes: Writing Course-Intermediate

HSTR 335 - Latin America: Workers & Labor. 3 Credits.

(WRLD) 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 345H - Modern China. 3 Credits.

(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.

HSTR 348 - Britain 1485-1688. 3 Credits.

(EU) 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. 3 Credits.

(EU) The social, political, cultural, and intellectual consequences of British expansion, financial and industrial revolutions, and revolutionary movements.

HSTR 350 - Modern Britain. 3 Credits.

(EU) 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. 3 Credits.

(EU) Political, economic, and social upheaval and development.

HSTR 353 - Modern France. 3 Credits.

(EU) Political, economic, and social development.

HSTR 354 - Italy: 1300-1800. 3 Credits.

(EU) 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. 3 Credits.

(EU) The emergence of a united Italy, the triumph of fascism and contemporary Italian society.

HSTR 357 - Russia to 1881. 3 Credits.

(EU) Emphasis on the autocratic political tradition, Westernization, and territorial expansion.

HSTR 358 - Russia Since 1881. 3 Credits.

(EU) Emphasis on modernization and the revolutionary movement; the Bolshevik Revolution and Stalinist era; the decline of Soviet system.

HSTR 361 - Germ:Augsburg-Bismarck. 3 Credits.

(EU) Political, economic and social development of the states of the Holy Roman Empire from 1555-1866.

HSTR 363 - Eastern Europe. 3 Credits.

(EU) 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. 3 Credits.

(AM) A history of the human-nature interaction in the United States.

HSTR 368 - Iran Between Two Revolutions. 3 Credits.

(WRLD) 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. 3 Credits.

(AM) The contemporary trans-Mississippi West.

HSTR 377 - European Internal Relat. 3 Credits.

(EU) The nature, evolution, and functions of the European diplomatic system from the Ancient World to 1870.

HSTR 386 - Nationalism Modern Middle East. 3 Credits.

(WRLD) 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.

HSTR 391 - Special Topics. 1-12 Credits.

(R-12) Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

HSTR 392 - Independent Study. 1-12 Credits.

(R-12)

HSTR 394 - Seminar. 1-6 Credits.

(R-6) A review and discussion of current research. Topics vary.

HSTR 396 - Independent Study. 1-12 Credits.

(R-12) Course material appropriate to the needs and objectives of the individual student.

HSTR 398 - Internship. 1-6 Credits.

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.

HSTR 400 - Historical Research Seminar. 3 Credits.

Prereq., WRIT 101 or equivalent, and one intermediate writing course, HSTR 200 and 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.

Gen Ed Attributes: Writing Course-Advanced

HSTR 401 - The Great Historians. 3 Credits.

(EU) Prereq., WRIT 101 (or higher) or equivalent. The history and philosophy of history.

Gen Ed Attributes: Writing Course-Intermediate

HSTR 418 - Britain 1500 - 1800. 3 Credits.

(EU) Prereq., WRIT 101 or equivalent, and one intermediate writing course, HSTR 200, enrollment for history majors and minors, graduate students in history, or by consent of the instructor. Recommended HSTR 348 or 349. 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.

Gen Ed Attributes: Writing Course-Advanced

HSTR 435 - Lat Am Human Rgts & Memory. 3 Credits.

(WRLD) 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. 3 Credits.

(WRLD) Prereq., WRIT 101 or equivalent, and one intermediate writing course, HSTR 200 and 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.

Gen Ed Attributes: Writing Course-Advanced

HSTR 441 - Islam and the West. 3 Credits.

(WRLD) 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. 3 Credits.

(WRLD) 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. 3 Credits.

(WRLD) 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. 3 Credits.

(WRLD) Analysis of the study of human artistic creativity and scientific innovations of various cultures in Central and Southwest Asia since ancient times.

HSTR 491 - Special Topics. 1-12 Credits.

(R-12) Experimental offerings of visiting professors, experimental offerings of new courses, or one time offerings of current topics.

HSTR 492 - Independent Study. 1-12 Credits.

(R-12) Prereq., consent of instr.

HSTR 494 - Seminar. 1-6 Credits.

(R-6) Prereq., consent of instr. A review and discussion of current research. Topics vary.

HSTR 495 - Special Topics. 1-12 Credits.

(R-12) Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

HSTR 500 - History Pedagogy. 1 Credit.

(R-4) This course prepares graduate students to teach undergraduate courses in history. Level: Graduate

HSTR 501 - Readings in Early Modern History. 3 Credits.

(R-6) A graduate readings seminar designed to acquaint students with European historiography. The chronological, geographic, or thematic focus of the course may vary, depending on the instructor. Level: Graduate

HSTR 502 - Readings in Modern European History. 3 Credits.

(R-6) A graduate readings seminar designed to acquaint students with the historiography of modern Europe. The chronological, geographic, or thematic focus of the course may vary, depending on the instructor. Level: Graduate

HSTR 516 - Modern Europe. 3 Credits.

Intensive reading in 19th and 20th century European history. Level: Graduate

HSTR 540 - Europ Cultural & Intellect. 3 Credits.

Intensive reading. Level: Graduate

HSTR 585 - Latin America. 3 Credits.

Intensive reading in Colonial and Modern Latin American history. Level: Graduate

HSTR 594 - Seminar. 1-12 Credits.

(R-12) Prereq., 27 credits in history. Directed research. Level: Graduate

HSTR 595 - Special Topics. 1-9 Credits.

(R-9) Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. Level: Graduate

HSTR 596 - Independent Study. 1-12 Credits.

(R-12) Course material appropriate to the needs and objectives of the individual student. Level: Graduate

HSTR 597 - Research in History. 1-9 Credits.

(R-9) Directed individual research and study appropriate to the back ground and objectives of the student. Level: Graduate

HSTR 598 - Internship. 1-8 Credits.

(R-8) Prereq., consent of department and Internship Services office. Practical application of classroom learning in off-campus placements. Level: Graduate

HSTR 599 - Professional Paper. 1-6 Credits.

(R-6) Preparation of a professional paper appropriate to the needs and objectives of the individual student. Level: Graduate

HSTR 696 - Independent Study. 1-12 Credits.

HSTR 699 - Thesis/Dissertation. 1-9 Credits.

(R-6) Preparation of a thesis or manuscript based on research for presentation and/or publication. Level: Graduate

Honors (HONR) < University of Montana

Honors (HONR)

HONR 120 - Introduction to Honors. 1 Credit.

Offered autumn. Interdisciplinary offerings by various faculty. Orientation to practical and theoretical issues facing students entering college.

HONR 121L - Ways of Knowing. 3 Credits.

Offered autumn and spring. Prereq., WRIT 101 (or higher) or equivalent. A critical assessment of contrasting epistemological stances expressed in various views of the divine, nature, society and the self.

Gen Ed Attributes: Lit & Artistic Studies (L), Writing Course-Intermediate

HONR 122E - Ways of Knowing II. 3 Credits.

Offered spring. Prereq., HONR 121L or LSH 151L or LSH 152L. This course traces the major Western ethical traditions, examines the influence of those traditions in normative political theory, and provides dramatic illustrations of the moral life.

Gen Ed Attributes: Ethical & Human Values Course, Democracy and Citizenship (Y)

HONR 190 - Supervised Research and Creative Scholarship. 1-6 Credits.

(R-6) Offered every term. Prereq., consent of instr.

HONR 191 - Special Topics. 1-6 Credits.

(R-6) Experimental offerings of visiting professors, experimental offerings of new courses, or one time offerings of current topics.

HONR 192 - Independent Study. 1-6 Credits.

(R-6) Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student.

HONR 194 - Seminar. 1-6 Credits.

(R-6) A review and discussion of current research. Topics vary.

HONR 198 - Internship. 1-6 Credits.

Prereq., consent of instr. Practical application of classroom learning during placements off campus. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation.

HONR 270 - Service Learning Seminar. 2 Credits.

This service learning course provides students with an in-depth, week-long community service experience in the West. Students participate in a seminar class prior to service and learn through active reflection and discussion. Students will explore aspects of citizenship and civic responsibility for addressing and solving social problems. Students explore aspects of citizenship and civic responsibility to address and solve social problems.

HONR 272 - Leadership for Social Change. 3 Credits.

Offered spring. This service-learning course provides students with a broad overview of the social change model of leadership development through engagement with campus and community organizations. Students will examine a variety of leadership models, analyze their own capacity for ethical leadership, and develop a personal leadership philosophy and social change plan based on individual values.

HONR 274 - Advocate Leadership Seminar. 2 Credits.

Offered spring. Prereq., Consent of instr. Members of the university's Advocates are given responsibilities and opportunities generally reserved for paid professionals. This course teaches requisite leadership competencies, skills and articulation. Advocates develop situational decision-making and will be assessed through traditional letter grade and interactive skill evaluation.

HONR 291 - Special Topics. 1-6 Credits.

(R-6) Experimental offerings of visiting professors, experimental offerings of new courses, or one time offerings of current topics.

HONR 298 - Internship. 1-6 Credits.

(R-6) Prereq., consent of instr. Practical application of classroom learning during placements off campus. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation.

HONR 320E - Art of Inquiry: Research and Capstone Seminar. 3 Credits.

Offered autumn and spring. Designed to assist undergraduate students with their independent research projects. This seminar enables students conducting research in separate disciplines to apply the intellectual strategies and to explore the ethical concerns common to research in most disciplines.

Gen Ed Attributes: Ethical & Human Values Course

HONR 370 - Pre-Law Seminar. 1 Credit.

Offered spring or autumn. This course gives students specific information about the law school application process, the life of a law student, and various careers in the law. Students will have unique opportunities to interact with legal professionals and law school admission officers to explore their futures in law school and the legal profession.

HONR 372 - Global Health Issues. 2 Credits.

Offered spring. This course examines the social, cultural, and political aspects of global health issues. Stressing principles of intercultural communication, we will examine the key determinants of public health in developing nations. We will enhance our understanding of the global dimensions of health and disease, the relative effectiveness of various health care initiatives, and the short- and long-term outcomes of diseases and health care interventions.

HONR 390 - Supervised Research and Creative Scholarship. 1-6 Credits.

(R-6) Offered every term. Prereq., consent of instr.

HONR 391 - Special Topics. 1-6 Credits.

(R-6) Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

HONR 392 - Independent Study. 1-6 Credits.

(R-6) Offered intermittently. Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student.

HONR 398 - Internship. 1-6 Credits.

Prereq., consent of instr. Practical application of classroom learning during placements off campus. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation.

HONR 491 - Special Topics. 1-6 Credits.

(R-6) Experimental offerings of visiting professors, experimental offerings of new courses, or one time offerings of current topics.

HONR 492 - Independent Study. 1-6 Credits.

(R-6) Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student.

HONR 494 - Senior Seminar. 1-6 Credits.

(R-6) A review and discussion of current research. Topics vary.

HONR 495 - Practicum. 1-6 Credits.

(R-6) Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student.

HONR 498 - Internship. 1-6 Credits.

(R-6) Prereq., consent of instr. Practical application of classroom learning during placements off campus. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation.

HONR 499 - Honors Thesis/Project. 1-9 Credits.

(R-9) Prereq., consent of thesis/project director and dean of Honors College. Preparation of a thesis or manuscript based on research for presentation and/or publication.

Hospitality, Tourism, & Rec. (HTR) < University of Montana

Hospitality, Tourism, & Rec. (HTR)

HTR 107 - Intro Hospitality Management. 3 Credits.

Offered autumn. Offered at Missoula College. 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. 3 Credits.

Offered spring. Offered at Missoula College. 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.

HTR 298 - Internship. 4 Credits.

Offered at Missoula College. This course provides students with the opportunity to gain practical experience in the hospitality industry. Students will secure a position in one of the areas of the hospitality industry and work at least 180 hours. Students will also gain knowledge in how to properly and effectively prepare a resume, cover letter, and for a job interview. The internship will culminate in a portfolio of their accomplishments as well as a paper detailing the knowledge gained from the experience in reference to their job outcomes and goals.

Human and Family Development (HFD) < University of Montana

Human and Family Development (HFD)

HFD 099 - Developmental. 1-99.99 Credits.

HFD 199 - Lower-Division Elective. 1-99.99 Credits.

HFD 298 - Internship. 1-4 Credits.

R-4) 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.

HFD 398 - Internship. 1-4 Credits.

(R-4) 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.

HFD 399 - Upper-Division Elective. 1-99.99 Credits.

HFD 490 - Practicum in Human Dev. 1-6 Credits.

(R-6) Offered intermittently. Prereq., 12 credits in HFD. Supervised fieldwork in settings relevant to developmental topics, including school classrooms; child/family welfare agencies; various institutions and programs for children, juveniles, or the aged.

HFD 494 - Seminar in Human Development. 1-3 Credits.

(R-3) Offered autumn. Discussion of selected problems in human development. Emphasis on integrating theory and practice.

HFD 495 - Special Topics. 1-9 Credits.

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

HFD 498 - Internship. 1-4 Credits.

(R-4) 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. Students may take this course at any time after declaring the minor.

Information Technology Systems (ITS) < University of Montana

Information Technology Systems (ITS)

ITS 150 - CCNA 1: Exploration. 3 Credits.

Offered autumn and spring. Offered at Missoula College. Introduction to networking field including terminology; protocols; local-area and wide-area networks; the OSI model; topologies; IP addressing; cabling and cabling tools; routers and router programming. Ethernet and network standards; and wireless technologies.

ITS 152 - CCNA 2: Exploration. 3 Credits.

Offered autumn. Offered at Missoula College. Prereq., ITS 150. Covers router theory and technologies including configurations, IOS software management, routine protocol configuration, TCP/IP, access-lists and introduction to LAN switching.

ITS 165 - OS Commands and Scripts. 3 Credits.

Offered autumn. Offered at Missoula College. Prereq.: M 090 or consent of instructor. Introduction to operating system concepts through the use of contemporary software. Emphasizes file system management, networking, installation, maintenance, management, and disaster recovery practices using both the command interpreter and graphical user interface.

ITS 191 - Special Topics. 1-6 Credits.

(R-6) Offered intermittently. Offered at Missoula College. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

ITS 210 - Network OS - Desktop. 3 Credits.

Offered spring. Offered at Missoula College. Prereq., ITS 150. This class provides in-depth study of a secure, multi-user, client-based network operating system. Topics include installation, administration of resources, performance, network services, and security.

ITS 212 - Network OS - Server Admin. 3 Credits.

Offered autumn. Offered at Missoula College. Prereq.: ITS 150 and ITS 210. This course covers server technologies commonly used in local area networking. Topics include installation, administration, storage, application services, network services, security, reliability, and availability.

ITS 214 - Network OS - Infrastructure. 3 Credits.

Offered autumn. Offered at Missoula College. Prereq., ITS 212. Principles and implementation of enterprise networking services. Topics include Protocol Binding, DNS, DHCP, WINS, Remote Access, IP Routing, IP Security, Network Address Translation, and Certificate Services.

ITS 221 - Project Management. 3 Credits.

Offered autumn. Offered at Missoula College. Prereq., CSCI 172. Investigation of topics in project management including scope, definition, risk, procurement and the RFP., management of time, cost, quality, and human resources. Concepts are reinforced with PM software.

ITS 222 - Enterprise Security. 3 Credits.

Offered spring. Offered at Missoula College. Prereq./Co-req, ITS 210 and 214. Examination of general information technology security concepts. Topics include access control, authentication, attack methods, remote access, web security, wireless networks, cryptography, internal infrastructure security, and external attacks. Security procedures, organizational policies, risk management and disaster recovery addressed.

ITS 250 - CCNA 3: Exploration. 3 Credits.

Offered spring (first half). Offered at Missoula College. Prereq., ITS 152. Covers router configurations including advanced IP addressing techniques, variable length subnet masking, intermediate routing protocols, Ethernet switching, virtual LANs, spanning-tree protocol, and VLAN trucking protocol.

ITS 252 - CCNA 4: Exploration. 3 Credits.

Offered (second half). Offered at Missoula College. Prereq., ITS 152. Project-based course in wide-area networking including advanced IP addressing techniques, network address translation, port address translation, DHCP, WAN technology and terminology, PPP, ISDN, DDR, Frame Relay, network management, and introduction to optical networking.

ITS 271 - Securing Desktop/Mobile Dev.. 4 Credits.

Offered at Missoula College. Course provides advanced technical information and relevant skills to successfully secure end-user devices, including desktop and laptop systems, tablets, cellular phones, and other portable computing equipment. Building on existing knowledge and skills in the areas of server management, network management, and security, students will gain mastery-level knowledge of security issues and best practices. Course content covers client/server exposures and protections (authentication options, packet signing and encryption of network traffic, appropriate implementation of permissions and rights); malware threats and treatments; transmission choices and precautions (wired, wireless,

remote desktop access, virtual private networking (VPN)); cloud computing considerations; and corporate mobile device best practices. Hardening of the operating system and application software is also covered. Course content will focus on business-focused security practices to prepare students for Security+, CISSP, and Security Pro industry certifications.

ITS 273 - Securing Networks. 4 Credits.

Offered at Missoula College. Course provides advanced technical information and relevant skills to secure servers and business information. Building on existing knowledge and skills in the areas of server management, network management, and security, students will gain mastery-level knowledge of security issues and best practices. Students will examine and apply hardening techniques to operating systems and infrastructure-based applications. Strategies to ensure business continuity and data security are emphasized, including policy, data preservation, disaster preparedness, and disaster recovery. Legal guidelines and requirements, both domestic and international, are examined in the context of responsible and ethical computer use. Course content will focus on business-focused security practices to prepare students for the Security+, CISSP, and Security Pro industry certifications.

ITS 275 - Border/Perimeter Network Sec. 4 Credits.

Offered at Missoula College. Course provides advanced technical information and relevant skills to successfully secure computer networks at the public/private interface. Material focuses on hardware- and software-based techniques to prevent and monitor unauthorized or malicious access to corporate networks and servers. Building on existing knowledge of border and perimeter security, students will develop and implement best practices guidelines for boundary-related devices and software. Students will establish baseline assessments of network security from public access points and identify known and/or potential security vulnerabilities. Course content will focus on business-focused security practices to prepare students for the Security+, CISSP, and Security Pro industry certifications.

ITS 277 - Software Assurance and File Sy. 4 Credits.

Offered at Missoula College. Course provides advanced technical information and relevant skills to methodically secure software, including operating systems, custom application software, and commercially-available packages. Students will classify application software (including, but not limited to customer-facing, employee/partner, mobile/endpoint, database, and cloud-based), and perform risk analyses and common weakness assessments against these programs. Students will research various commercial, professional, and governmental security organizations and create a personalized repository of security-related checklists, toolkits, reference material, and resources. Students will investigate low-level file system structures such as master file tables, allocation tables, free space tables, file table entries, and metadata fields. Using common file signatures and checksums, students will verify internal content against external and metadata indicators. Students will examine `hidden? disk space areas, including file, volume, and/or partition slack. Course content will focus on business-focused security practices to prepare students for Security+, CISSP, and Security Pro industry certifications.

ITS 280 - Computer Repair & Maint.. 3 Credits.

Offered spring. Offered at Missoula College. This course provides an in-depth study of personal computer hardware with focus on field replaceable units (FRU's). Topics include: system boards, processors, storage devices, I/O ports, cabling, power supplies, multimedia devices, printers, and troubleshooting.

ITS 289 - Professional Certification. 1 Credit.

(R-4) Offered autumn and spring. Offered at Missoula College. Prereq., consent of instr. Review objectives of an information technology industry-based professional certification. A thorough review of certification objective, preparation strategies, and exam strategies will be covered. Course can be repeated for different industry-based professional certifications.

ITS 290 - Undergraduate Research. 1-6 Credits.

(R-6) Offered at Missoula College. Consent of instructor required. Independent research under the direction of a faculty member. Graded credit/no credit.

ITS 291 - Special Topics. 1-6 Credits.

(R-6) Offered intermittently. Offered at Missoula College. Experimental offerings of visiting professors, experimental offerings of new courses, or one time offerings of current topics.

ITS 292 - Independent Study. 1-6 Credits.

(R-6) Offered intermittently. Offered at Missoula College. Prereq., consent of instr.

ITS 297 - Undergraduate Research. 1-10 Credits.

Offered intermittently. Offered at Missoula College. Preq. consent of instr. Independent research under the direction of a faculty member. Graded credit/no credit.

ITS 298 - Internship/Cooperative Educati. 2 Credits.

Offered autumn and spring. Offered at Missoula College. Not open to non-majors. On-the-job training in positions requiring advanced computer competencies. 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 a scheduled one-hour seminar.

International Development Stdy (IDS) < University of Montana

International Development Stdy (IDS)

IDS 191 - Special Topics. 1-6 Credits.

IDS 398 - IDS Internship. 1-6 Credits.

(R-6) Offered every term. Consent of instructor required. Special internships under instructor supervision offering practical experience.

IDS 490 - Research. 3 Credits.

This course is designed to enhance the participants? understanding of important methods used in the evaluation of international development programs. The toolkit of a student completing this course will include knowledge of basic methods and standard systems used worldwide for conducting such evaluations. You will learn how to design, conduct, report on and orally present your findings as if you are speaking to a group of donors, project planners or other stakeholders.

IDS 497 - Methods. 1-6 Credits.

Course is designed to enhance the participants? understanding of important methods used in the evaluation of international development programs. The toolkit of a student completing this course will include knowledge of basic methods and standard systems used worldwide for conducting such evaluations. You will learn how to design, conduct, report on and orally present your findings as if you are speaking to a group of donors, project planners or other stakeholders. You will study how to derive important monitoring and evaluation questions from existing literature, how to aim for specific professional outcomes such as the generation of a professional talk, poster, or paper, and the steps required along the way to get you to those outcomes. Survey design, identification and definition of critical M&E variables, predicting required analyses of those variables, LogFrame, Social Frameworks, and CapacityWORKS will be taught in this class.

Irish (IRSH) < University of Montana

Irish (IRSH)

IRSH 101 - Elementary Irish. 4 Credits.

Offered autumn or spring. 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 can be fulfilled by successfully completing IRSH 101 and IRSH 102.

IRSH 102 - Elementary Irish II. 4 Credits.

Offered autumn or spring. 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. Students will also learn more songs and poems from the Irish tradition and thus increase their idiomatic and syntactical knowledge of the language. This course is housed in the English Department. The GenEd Foreign Language requirement can be fulfilled by successful completion of 102.

IRSH 103 - Elementary Irish III. 3 Credits.

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.

IRSH 201 - Intermediate Irish I. 4 Credits.

Offered spring semester. 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 three semester sequence (101, 102, 201, & 202) of Irish language study.

IRSH 202 - Intermediate Irish II. 4 Credits.

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 four semester sequence (101, 102, 201, & 202) of Irish language study.

IRSH 249 - The Irish. 3 Credits.

IRSH 250 - An Introduction to Irish Gaelic Literature. 3 Credits.

Offered every other autumn. This course will introduce students to the riches and delights of the literary tradition of Gaelic Ireland from the earliest times down to the Great Famine. Consulting texts in translation, students will read stories from the Heroic Literature of Ireland; they will learn of the impact of Christianity, the Viking Raids, the Norman invasion and the Tudor conquest on the canons of Irish literature.

IRSH 255 - From Warrior Training to National Sport: a History of Hurling. 3 Credits.

Offered every other spring. Unlike most modern sports, the Irish game of hurling is a very ancient game, going back, some scholars suspect over 3,000 years. This course will examine the history of the game; its place in the literature of Ireland; and role of hurling clubs in the creation of young rebels who would go out to fight for Irish freedom. This course will be of particular interest to students at UM as the UM hurling team has won four out of the past five USA national championships.

IRSH 265 - From Bulls to Bullets: the Course of Irish History. 3 Credits.

Offered every other spring. This course surveys the history of Ireland and the Irish, from the enduring myths and legends of the island?s first inhabitants where the potent social and political representation of the Bull was used to demonstrate power, to the bullets and bombs that defined the lives of many in the northern part of the country in the twentieth century. Like any place, Ireland has a complicated and complex history, where many different groups coalesced and divided along social, economic and political grounds.

IRSH 291 - Special Topics. 1-4 Credits.

IRSH 292 - Independent Study. 1-3 Credits.

IRSH 345L - Literature in the Irish Lang. 3 Credits.

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.

Gen Ed Attributes: Lit & Artistic Studies (L)

IRSH 350 - The Literature of pre-Norman Ireland. 3 Credits.

Offered every other autumn. The objective of this course is to locate and examine Irish Gaelic literature of the pre-Norman period in the context of the native tradition and universal Church literature, to explore the ways in which the monks redacted ancient tales to achieve consensus for the new dispensation, and to analyze the impact of Christian culture on the canons of Irish literature.

IRSH 355 - The Politics of Culture: Irish America, the Gaelic Revival, and the Easter Rising. 3 Credits.

Offered every other spring. This course will examine the origins and formulation of this new vision, the Gaelic revival in Ireland and America, and at the role of Irish America in the formation of modern Irish identity and the achievement of an independent Irish republic.

IRSH 360 - Irish/N Irish Literature. 3 Credits.

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 365 - Ireland and America in the Age of Enlightenment and Revolution. 3 Credits.

Offered every other autumn. A number of ideas, circumstances and events tended to unite individuals and groups in eighteenth-century Ireland with colonists in British North America. This course examines the connections and events that shaped these opinions. The course begins by looking at the `Atlantic world? which brought people in Ireland, Britain and America closer through trade and emigration.

IRSH 370 - The Irish Conflict: 1968-1998. 3 Credits.

Offered every other autumn. This course examines the evolution, nature and context of the chronic civil and political unrest that erupted in the North of Ireland in 1968. When a civil rights movement aimed at securing such modest demands as `one man, one vote? met with vehement state resistance, Ireland was pitched into the most sustained political violence in post-World War Two Western Europe. The longest deployment of the British Army in history failed to contain the most sophisticated insurgency ever known. O?Donnell will identify and explain the major political forces in play; not least the agendas of all major combatants. Account will be taken of the international dimension of the `Long War?, including the role of both private and state actors in the USA. Students of this course will receive a comprehensive overview of an inter-generational conflict from its inception to the seismic Good Friday Agreement of 1998 which resulted in all major forces adopting purely political modes of contest. Printed primary, manuscript and online resources will be utilized on a case study basis. Subthemes include political propaganda; tactics and strategy of the Irish Republican Army; hungerstriking; counterinsurgency; `The Dirty War?; justice and the law and `peace processes?. On completion students will be well situated to pursue high level courses in programmes concerned with political science; military studies and jurisprudence.

IRSH 375 - The Irish and their Language. 3 Credits.

Offered every other spring. This course will examine the fortunes of the language from the earliest records to the present day. Students will consult the native record as well as the writings of the English invader. Their study will include an examination of the language and the worldview it presented - a worldview at variance with that of the English. They will learn about the role of the Irish of America in the movement to preserve and revive the language; and they will come to understand how the language we use not only unites us as a group, but also provides a philosophical foundation for our understand of the world.

IRSH 380 - Topics in Irish Studies. 3 Credits.

Offered intermittently. Prereq., WRIT 101 (or higher) or equivalent. 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.

Gen Ed Attributes: Writing Course-Intermediate

IRSH 381 - Contemporary Irish Women's Writing. 3 Credits.

Offered every other spring semester. This course is designed to provide students with the rhetorical knowledge and cultural perspectives necessary to be successful writers at the college-level and more specifically within the field of Irish Studies. This course emphasizes the importance of critical thinking, reading, and composing in an academic context. To do this, students will explore research practices within the field of Irish Studies and related disciplines (such as feminist rhetorical practices, women?s and gender studies, and postcolonial studies) and successful composing methods to bring these insights to the page. Students will expand their purview by examining the literary, historical, national, and gender contexts for interpreting Irish texts.

Gen Ed Attributes: Writing Course-Intermediate

IRSH 382 - Rockin' Rebels: Popular Irish Music from Traditional to Punk. 3 Credits.

Offered every other spring semester. This course explores the concept of Irishness through generative works of music by artists such as Sean O Riada, The Wolf Tones, The Pogues, Sinead O?Connor, U2, The Cranberries, Meav Ni Mhaolchatha, and Soule (not an exhaustive list). To do this the class will begin with an examination of traditional Irish music as a cultural form. Next, we will move through genres and decades charting political and cultural shifts as represented in folk, rebel, rock, punk, and pop music. We will explore concerns of authenticity and hybridity in Irish popular music and apply theoretical ways of understanding the reproduction and marketing of Irishness in a global context.

Gen Ed Attributes: Writing Course-Intermediate

IRSH 391 - Special topics. 1-6 Credits.

(R-9) Offered intermittently. Experimental offerings of visiting professors, new courses, or one-time offerings of current topics;

IRSH 398 - Internship. 1-6 Credits.

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.

IRSH 490 - Research. 1-9 Credits.

IRSH 491 - Special Topics. 1-3 Credits.

IRSH 492 - Independent Study. 1-3 Credits.

(R-9) Offered intermittently. Experimental offerings of visiting professors, new courses, or one-time offerings of current topics;

Italian (ITLN) < University of Montana

Italian (ITLN)

ITLN 101 - Elementary Italian I. 4 Credits.

Offered autumn. An introduction to Italian language and culture, with emphasis on the skills of reading, writing, comprehension, and speaking.

ITLN 102 - Elementary Italian II. 4 Credits.

Gen Ed Attributes: Foreign Language Requirement

ITLN 191 - Special Topcis. 1-9 Credits.

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

ITLN 201 - Intermediate Italian I. 4 Credits.

Offered autumn. Prereq., ITAL 102 or equiv. Expansion of active skills? listening, speaking, reading, writing, plus further cultural analysis.

ITLN 202 - Intermediate Italian II. 4 Credits.

ITLN 291 - Special Topics. 1-9 Credits.

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

ITLN 391 - Special Topics. 1-9 Credits.

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

ITLN 491 - Special Topics. 1-9 Credits.

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

Japanese (JPNS)

JPNS 101 - Elementary Japanese I. 5 Credits.

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.

JPNS 102 - Elementary Japanese II. 5 Credits.

Offered spring. Prereq., JPNS 101. Continuation of 101.

Gen Ed Attributes: Foreign Language Requirement

JPNS 150H - Japanese Cult & Civiliz. 3 Credits.

Offered intermittently. Same as AS and LS 210H. The historical, religious, artistic, literary and social developments in Japan from earliest times to the present.

Gen Ed Attributes: Historical Studies, Cultural Intl Diversity (X)

JPNS 191 - Special Topics. 1-9 Credits.

(R?9) Offered spring. Experimental offerings of visiting professors, experimental offerings of new courses, or one?time offerings of current topics.

JPNS 201 - Intermediate Japanese I. 5 Credits.

Offered autumn. Prereq., JPNS 102 or equiv. Reading and writing kanji; building oral/aural fluency.

Gen Ed Attributes: Foreign Language Requirement

JPNS 202 - Intermediate Japanese II. 5 Credits.

Offered spring. Prereq., JPNS 201 or equiv. Continuation of JPNS 201.

Gen Ed Attributes: Foreign Language Requirement

JPNS 291 - Special Topics. 1-9 Credits.

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

JPNS 292 - Independent Study. 1-6 Credits.

(R-6) Offered autumn and spring. Course material appropriate to the needs and objectives of the individual student.

JPNS 301 - Advanced Japanese. 4 Credits.

Offered autumn. Prereq., JPNS 202 or equiv. Development of greater reading and speaking proficiency. Vocabulary enhancement and kanji (Chinese characters) are emphasized.

Gen Ed Attributes: Foreign Language Requirement

JPNS 302 - Advanced Japanese. 4 Credits.

Offered spring. Prereq., JPNS 301 or equiv. Continuation of 301.

Gen Ed Attributes: Foreign Language Requirement

JPNS 306 - Japanese for Business/Tour. 3 Credits.

Offered autumn alternate years. Prereq., JPNS 202 or equiv. Vocabulary and idiom of oral and written communication in business and tourism. Professional, ethical practices and special etiquette.

JPNS 312 - Jpns Lit Medieval to Mod. 3 Credits.

Offered spring alternate years. Prereq., WRIT 101 or equivalent, and one intermediate writing course. Introduction to the literature of Japan from the 15th to the 20th century.

Gen Ed Attributes: Writing Course-Advanced

JPNS 371 - Japanese Film and Anime. 3 Credits.

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 390 - Research. 1-12 Credits.

Offered intermittently. Paid work experience in Japan, combined with language/culture course work by correspondence directed by UM department staff.

JPNS 391 - Special Topics. 1-12 Credits.

(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. 1-6 Credits.

(R-6) Offered autumn and spring. Course material appropriate to the needs and objectives of the individual student.

JPNS 398 - Internship. 1-6 Credits.

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.

JPNS 411 - Mod Jpns Wrtrs/Thinkers. 3 Credits.

(R-6) Offered autumn or spring. Prereq., JPNS 202. 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. 3 Credits.

Offered intermittently. Prereq., JPNS 202. 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. 3 Credits.

Offered spring even?numbered years. Prereq., JPNS 202. 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. 3 Credits.

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.

JPNS 491 - Special Topics. 1-9 Credits.

(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. 1-6 Credits.

(R-6) Offered autumn and spring. Course material appropriate to the needs and objectives of the individual student.

Journalism (JRNL)

JRNL 100H - Media History and Literacy. 3 Credits.

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.

Gen Ed Attributes: Historical Studies, Democracy and Citizenship (Y)

JRNL 102Y - News Literacy. 3.000 Credits.

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.

Gen Ed Attributes: Democracy and Citizenship (Y)

JRNL 105X - Global Current Events. 3 Credits.

Offered autumn and spring. Survey and study of current global news intended to make students familiar with the context and vocabulary necessary to understand the news, the background and history behind news events, and the implications that stem from it.

Gen Ed Attributes: Cultural Intl Diversity (X)

JRNL 140A - Intro Radio/Audio Storytelling. 3 Credits.

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.

Gen Ed Attributes: Expressive Arts Course (A)

JRNL 170 - Elements of News Writing. 3 Credits.

Offered autumn 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 191 - Special Topics. 1-6 Credits.

JRNL 201 - Diversity in Media. 3 Credits.

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. 3 Credits.

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 appropriate software. 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.

JRNL 260 - Sports Journalism. 3 Credits.

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. 3 Credits.

Offered autumn and spring. Prereq., WRIT 101 (or higher) or equivalent, JRNL 100H and JRNL 170. Fundamentals of interviewing, reporting, writing and audio editing of news stories for print, online and broadcast media.

Gen Ed Attributes: Writing Course-Intermediate

JRNL 291 - Special Topics. 1-6 Credits.

(R-6) Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

JRNL 295 - Special Topics. 1-9 Credits.

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

JRNL 300 - First Amendment and Journalism Law. 3 Credits.

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.

JRNL 328 - Intermediate Photojournalism. 3 Credits.

Offered autumn and spring. Prereq., JRNL 257. 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.

JRNL 330 - News Editing. 3 Credits.

Offered autumn and spring. Prereq., JRNL 270. Fundamentals of copy editing and headline writing for print and online media.

JRNL 331 - Intermediate Web Reporting. 3 Credits.

Offered autumn and spring. Prereq., JNRL 270. 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 of these emerging technologies.

JRNL 332 - Social Media and Audience. 3 Credits.

Students learn to identify different and distinct audiences and to identify specific groups and users of information. The will develop research skills and craft content for social media platforms tailored to reach and engage those audiences. Students will learn the basics of audience research and learn best practices for the major social media platforms.

JRNL 340 - Intermediate Audio. 3 Credits.

Offered autumn. Prereq., WRIT 101 or equivalent, JRNL 270 and JRNL 257. Use of audio in news, interview and feature programs. Students will research, write, gather audio and produce audio segments and programs using digital audio equipment and studios. They will anchor and host live news and interview segments on KBGA College Radio.

Gen Ed Attributes: Writing Course-Advanced

JRNL 342 - Multimedia Sports Announcing and Writing. 3 Credits.

Offered autumn. Prereq., JRNL 257 and JRNL 270. Students learn to research, produce and announce live sports broadcasts for audio and video audiences. They will also write preview and summary coverage for an online audience and use social media for reporting.

JRNL 350 - Intermediate Video Photography. 3 Credits.

Offered autumn. Prereq., JRNL 257. Digital video photography, storytelling and non-linear editing. Students will be introduced to high-definition video cameras and advanced video editing techniques and build on photojournalism skills introduced in JRNL 257. Students produce television segments intended to air on MontanaPBS.

JRNL 351 - Intermediate Video Directing. 3 Credits.

Offered spring. Prereq., JRNL 350. Students will learn the fundamentals of production and directing of studio-based television/video programming. Students direct commercials, promotions and news content. Students will work with those enrolled in Intermediate Video Reporting & Producing to create and produce newscasts.

JRNL 352 - Intermediate Video Reporting and Producing. 3 Credits.

Offered spring. Prereq., WRIT 101 or equivalent, JRNL 270 and JNRL 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.

Gen Ed Attributes: Writing Course-Advanced

JRNL 362 - Feature Writing. 3 Credits.

Offered autumn and spring. Prereq., WRIT 101 or equivalent and JNRL 270. Classroom instruction and practical experience in applying feature-writing techniques to the coverage of news, entertainment and sports for print and electronic media.

Gen Ed Attributes: Writing Course-Advanced

JRNL 370 - Public Affairs Reporting. 3 Credits.

Offered autumn and spring. Prereq., WRIT 101 or equivalent and JRNL 270. Study and practice of reporting public issues with emphases on news sources, interpretive writing and the coverage of local, state and federal governments.

Gen Ed Attributes: Writing Course-Advanced

JRNL 391 - Special Topics. 1-9 Credits.

(R-9) Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

JRNL 392 - Independent Study in Broadcasting. 1-3 Credits.

(R-6) Offered every term. Prereq., consent of instr. and broadcast faculty. Independent study in broadcasting issues of interest.

JRNL 396 - Advanced Journalism Problems. 1-6 Credits.

(R-6) Offered every term. Prereq., consent of instr. Independent study.

JRNL 400 - Ethics & Trends in News Media. 3 Credits.

Offered autumn and spring. Prereq., JRNL 300 (for minors) or junior status for majors. 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.

JRNL 410 - Native News Honors Project. 1-3 Credits.

(R-6) Offered spring. Prereq., JRNL 270 and consent of instr. Researching, photographing and designing stories about Montana's Native American communities. Photojournalism students travel with reporters to Montana's seven Indian reservations to document in- depth stories on a single topic and produce a newspaper tab and a multimedia website.

JRNL 411 - Reporting Native News. 1-6 Credits.

(R-6) Offered spring. Prereq., JRNL 270 and 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. Reporting students travel with photojournalists to Montana's seven Indian reservations to document in- depth stories on a single topic and produce a newspaper tab and a multimedia website.

JRNL 412 - Montana Journalism Review. 1-6 Credits.

(R-6) Offered autumn. Prereq., JRNL 270 and consent of instr. Students create a magazine including writing, editing, design and overall production and distribution of a print publication intended for a broad audience inside and outside Montana.

JRNL 414 - Investigations. 3 Credits.

Offered autumn. Prereq., JRNL 370 or JRNL 352. Introduction to methods and ethics of investigative reporting, emphasizing computer-assisted research and analysis of public records and databases.

JRNL 427 - Advanced Photo & Multimedia Storytelling. 3 Credits.

Offered spring. Prereq., JRNL 328. Students discuss, research, photograph, design, write and produce several documentary-style stories and essays using still photography, video, audio, text and graphics.

JRNL 428 - Freelance Photography. 3 Credits.

Offered autumn and spring. Prereq., JRNL 328. Course centers on the technical aspects of digital still and video camera work for freelance assignments. Students produce editorial and adventure portraiture, food illustrations, fashion projects and travel stories. Business and marketing practices will include copyright, branding, usage, pricing, licensing and negotiation.

JRNL 429 - Documentary Photojournalism. 3 Credits.

Offered autumn. Prereq., JRNL 427 or consent of instr. Production of an in-depth documentary project involving a social issue with intent to educate and inform. Students write, shoot and design final project in book form or produce a multimedia project using stills, video, audio and text.

JRNL 430 - Print & Web Editing & Design. 3 Credits.

Offered spring. Prereq., JRNL 330 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 newsletters, brochures, newspaper and magazine pages, websites, and other publications.

JRNL 431 - Online Journalism. 3 Credits.

Offered autumn and spring. Prereq., JRNL 270 or consent of instructor. 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.

JRNL 432 - Social Media and Audience II. 3 Credits.

Prereq., JRNL 332 or consent of instructor. Having learned about the basics of audience research, goal setting and social media engagement in JRNL 332, this course focuses on having students work with real clients to assess their audiences, the goals for reaching them with information and their current social media strategy. Students will then work with the clients to develop and deploy new social media content and strategies.

JRNL 433 - Marketing Your Work. 2 Credits.

Offered spring. Prereq., JRNL 270. 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. 3 Credits.

Offered spring. Prereq., JRNL 340 or consent of instr. Students will create long-form, in-depth audio programs such as radio documentaries and podcasts 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.

JRNL 470 - Covering Elections. 3 Credits.

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.

JRNL 471 - Covering the Legislature. 3 Credits.

Offered spring of odd-numbered years. Prereq., consent of instr. Students will produce coverage from Helena of Montana?s biennial legislative sessions for newspapers, broadcast stations and the web.

JRNL 472 - Opinion Writing. 3 Credits.

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.

JRNL 473 - International Reporting. 3 Credits.

Offered intermittently. Prereq., JRNL 270 or consent of instr. Prepares students to report internationally and to develop global sources for local stories. History and practice of foreign correspondence.

JRNL 480 - Advanced Video Reporting. 3 Credits.

Offered autumn. Prereq., JRNL 351 or 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.

JRNL 481 - Adv Video Photo and Directing. 3 Credits.

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.

JRNL 482 - Advanced Video Storytelling. 3 Credits.

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.

JRNL 484 - Daily News. 1-2 Credits.

(R-3) Offered autumn and spring, mountain campus in a face to face setting. Prereq., Journalism major, and JRNL 351 or JRNL 352, and consent of instructor. Students will report, write, produce, anchor, direct and technical direct daily television news updates to be made available to commercial and public television stations in Montana.

JRNL 488 - Student Documentary Unit. 3 Credits.

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 television documentary to air on Montana PBS and other outlets. Students will research, report, write, photograph, edit and promote the film. Co-convenes with JRNL 688.

JRNL 491 - Special Topics. 1-9 Credits.

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

JRNL 494 - Pollner Seminar. 3-6 Credits.

(R-6) Offered autumn and spring. Prereq., Consent of Journalism Director. 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.

JRNL 498 - Supervised Internship. 1-2 Credits.

(R-2) Offered every term. Prereq. Junior status and consent of instructor. Open to students with the appropriate intermediate skills. For each credit, students perform 160 hours of work for news, communications, and media organizations. All internships must be pre-approved by the faculty internship supervisor.

JRNL 505 - Journalism and Society Seminar. 3 Credits.

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

JRNL 567 - Press/Broadcast Law. 3 Credits.

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

JRNL 570 - Reporting. 3 Credits.

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

JRNL 575 - Story Lab. 3 Credits.

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

JRNL 590 - Methods in Journalism Research. 3 Credits.

Prereq., consent of the graduate program director. Directed individual research and study appropriate to the back ground and objectives of the student. Level: Graduate

JRNL 591 - Special Topics. 1-8 Credits.

(R-8) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. Level: Graduate

JRNL 592 - Independent Study. 3 Credits.

(R-6) Prereq., consent of instr. Production and direction of studio and remote television programs. Level: Graduate

JRNL 594 - Seminar. 1-9 Credits.

(R-9) Offered intermittently. A review and discussion of current research. Topics vary. Level: Graduate

JRNL 599 - Professional Project. 1-6 Credits.

(R-6) Offered every term. Planning, research and execution of a major project in print, photographic or broadcast journalism. Level: Graduate

JRNL 620 - Covering Native American Issues. 3 Credits.

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-convenes with JRNL 410 and JOUR 411. Level: Graduate

JRNL 640 - Montana Journalism Review. 1-3 Credits.

(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 an annual publication of the School of Journalism. Co-convenes with JRNL 412. Level: Graduate

JRNL 650 - Gr Bcst Newsroom-Editorial. 3 Credits.

(R-6) Prereq., Consent of instr. Students fulfill all duties necessary to produce a weekly television newscast, including reporting, producing, directing, anchoring. Co-convenes with JRNL 480 and JRNL 481. Level: Graduate

JRNL 688 - Graduate Documentary. 3 Credits.

Offered spring. Prereq., Consent of instr., graduate standing. Students conceive, research, report, photograph and edit a television documentary intended for broadcast on Montana PBS. Co-convenes with JRNL 488. Level: Graduate

JRNL 690 - Research in Journalism. 1-9 Credits.

(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

JRNL 691 - Special Topics. 1-9 Credits.

JRNL 692 - Independent Study. 1-6 Credits.

Offered every semester. Prereq., Consent of graduate director. Allows appropriate independent research in journalism or media/communication issues related to natural resource and environmental issues. Level: Graduate

JRNL 698 - Externship. 1-3 Credits.

(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

JRNL 699 - Thesis. 1-6 Credits.

(R-6) Offered every term. Research and writing of master's thesis. Level: Graduate

Kinesiology (KIN) < University of Montana

Kinesiology (KIN)

KIN 201 - Basic Exercise Prescription. 3.000 Credits.

Offered every term. Theory, principles, and practice of exercise prescription for aerobic and resistance exercise programs for health, fitness and performance. Students must register for the lecture and a linked lab.

KIN 205 - Foundations of HHP. 3 Credits.

Offered autumn and spring. An overview of the foundational principles comprising the field of HHP with special emphasis on the historical and philosophical foundations, and the evolution of the unity of mind/body concept. Includes an overview of program options, analysis of future directions, and career choices.

KIN 248 - Principles Optimal Performance for Athletes. 2 Credits.

Offered autumn and spring. Introduction to an optimal performance model, with focus upon specific physical, psychological, and environmental factors that contribute to human performance.

KIN 292 - Independent Study. 1-6 Credits.

(R-6) Offered every term. Prereq., consent of advisor and instr. Course material appropriate to the needs and objectives of the individual student.

KIN 310 - Strength Training & Cond. 2 Credits.

This course is designed to introduce students to the fundamentals of aerobic exercise and resistance training related to health, fitness and performance. Subject matter will include, but is not limited to maximizing student involvement in the understanding of physical training and the designing of exercise programs for health (both physical and mental), fitness and performance. This course will lay a basic practical foundation for students to design training programs, understand and design programs for athletic performance and to develop the fundamental theories of training for future coaches.

KIN 320 - Exercise Physiology. 3 Credits.

Offered every term. Prereq., BIOH 370 or BIOH 211N, KIN 201; coreq., KIN 321. Investigation of the physiological changes and the significance of these changes as they occur during physical work, activity and exercise. Focus on basic energy, musculosketal, nervous, cardiovascular and respiratory systems as they relate to aerobic and anaerobic exercise. Emphasis will be placed on the response of these systems to both acute exercise, and the adaptations to chronic exercise. Credit not allowed toward graduate degree in the exercise science option in Health and Human Performance.

KIN 321 - Exercise Physiology Lab. 1 Credit.

Offered autumn and spring. Prereq., BIOH 370 or BIOH 211N; coreq., KIN 320. Laboratory session examining the physiological effect of the physical work, activity and exercise on the functions of the human body. Credit not allowed toward graduate degree in the exercise science option in Health and Human Performance.

KIN 322 - Kinesiology. 3 Credits.

Offered autumn. Prereq., BIOH 211N or BIOH 370; coreq., KIN 323. Anatomy and kinesiology of the neuromusculoskeletal system and body cavities in relation to movement and function.

KIN 323 - Anatomical Kinesiology Lab. 1 Credit.

Offered autumn. Prereq., BIOH 211N or BIOH 370; coreq., KIN 322. Anatomy and kinesiology of the neuromusculoskeletal system and body cavities in relation to movement and function.

KIN 330 - Motor Learning and Control. 3 Credits.

Offered autumn and spring. Prereq., BIOH 201N or BIOH 365. Focused on developing an understanding of the anatomy and physiology within the nervous system necessary for movement. Establishes an understanding of the basic science involved in the control of motor tasks, and uses this foundation to evaluate case studies that will focus on sport performance, clinical deficits, age-related alterations, learning of motor tasks following injury, and other motor-related tasks.

KIN 410 - Advanced Strength Training & Cond. 3 Credits.

Offered spring. Prereq., KIN 320, senior or graduate student status. Advanced resistance and aerobic exercise testing and prescription for both healthy and clinical populations.

KIN 425 - Biomechanics. 3 Credits.

Offered spring. Prereq., KIN 320 & M 115 or higher and major in health and human performance or athletic training. Description and analysis of the fundamental principles of human movement. Includes quantitative study of the Newtonian mechanics governing biological motion and the roles of the musculo-skeletal, nervous and cardio-vascular systems during human activity.

KIN 440 - Sport Psychology. 3 Credits.

Offered autumn. Prereq., upper-division or graduate status. Course content is focused on the historical development of sport psychology, with emphasis upon the major principles and tactics of the discipline, including motivation, confidence, imagery, leadership, and team building.

KIN 447 - Analytical & Communicative Techniques. 3 Credits.

Offered every term. Prereq., WRIT 101 or equivalent, and one intermediate writing course. Analysis and communicative critique of literature, cinema, and other forms of popular media that contain allegorical life themes. Substantial reading, speaking and writing component. Emphasis on improving and maintaining communication skills.

Gen Ed Attributes: Writing Course-Advanced

KIN 460 - ECG Assessment. 2 Credits.

Offered autumn. Prereq., junior, senior, or graduate status. Laboratory sessions combined with class sessions to understand electrocardiography and the assessment of electrocardiograms, both at rest and during exercise.

KIN 480 - Teaching Anatomy, Physiology. 4 Credits.

(R-4) Offered every term. Prereq., student must have received at least a ?B? in Human Anatomy and Physiology and consent of instructor. Students assist in preparation and grading of demonstrations and laboratory assignments, and provide laboratory instruction of undergraduate students enrolled in BIOH 201N/202N-211N/212N. Students are given advanced instruction in principles of human anatomy and physiology.

KIN 483 - Exercise Disease & Aging. 3 Credits.

Offered spring. Prereq., KIN 320,321, 460; coreq. KIN 484. Focus on guidelines for exercise testing and prescription for individuals with chronic disease including heart disease, diabetes, hypertension, arthritis, osteoporosis, elderly and pulmonary disease. Class requires 25 assigned hours of service learning. Covers material necessary for ACSM clinical certification exam when combined with KIN 201, 320, 321, 460, and 484.

KIN 484 - Exercise Disease & Aging Lab. 1 Credit.

Offered spring. Prereq., KIN 320, 321; coreq., KIN 483. Laboratory sessions focus on practical exercise testing and prescription for individuals with chronic disease including coronary heart disease, diabetes, hypertension, arthritis, osteoporosis, elderly and pulmonary disease; basic ECG testing and analysis. Covers material necessary for ACSM clinical certification exam when combined with KIN 201, 320, 321, 460, and 483.

KIN 490 - Undergraduate Research. 1-3 Credits.

(R-6) Offered every term. Prereq., consent of instr. Directed individual research and study appropriate to the back ground and objectives of the student.

KIN 492 - Independent Study. 1-3 Credits.

(R-6) Offered every term. Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student.

KIN 498 - Internship. 2-6 Credits.

(R-6) Offered every term. Prereq. all HHP options minimum junior standing and ECP 120/121 (or equivalent). Prereqs per option. Exercise Science Applied: KIN 320/321. If internship is coaching or strength & conditioning must also have completed KIN 410 and COA 405. Exercise Science Pre-Professional: KIN 320/321. If internship is cardiac rehab must also have completed KIN 460/483/484. Community Health: CHTH 335. Supervised field experiences with private businesses, public agencies, or institutions. 45 hours of internship site work = 1 credit. A maximum of 6 credits of Internship 498 may count toward graduation. Students should not be registered for more than 14 credits their internship semester.

KIN 499 - Capstone. 1-3 Credits.

(R 6) Offered autumn. Prereq., consent of instr. Independent work under the University omnibus option. See index.

Languages: Sign < University of Montana

Languages: Sign

SIGN 101 - Introduction to American Sign Language. 3 Credits.

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.

SIGN 201 - Intermediate American Sign Language. 3 Credits.

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.

Gen Ed Attributes: Foreign Language Requirement

Latin (LATN) < University of Montana

Latin (LATN)

LATN 101 - Elementary Latin I. 3 Credits.

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.

LATN 102 - Elementary Latin II. 3 Credits.

Offered spring. Prereq., LATN 101. Continuation of 101. Latin grammar, vocabulary, readings.

Gen Ed Attributes: Foreign Language Requirement

LATN 191 - Special Topics. 1-6 Credits.

(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. 3 Credits.

Offered autumn. Prereq., LATN 102 or equiv. Selections of Latin prose from the classical period, with complementary exercises in elementary composition.

Gen Ed Attributes: Foreign Language Requirement

LATN 202 - Intermediate Latin II. 3 Credits.

Offered spring. Prereq., LATN 201 or equiv. Latin epic poetry: Vergil's Aeneid.

Gen Ed Attributes: Foreign Language Requirement

LATN 292 - Independent Study. 1-6 Credits.

(R?6) Offered autumn and spring. Course material appropriate to the needs and objectives of the individual student.

LATN 311 - Major Latin Authors. 3 Credits.

(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. 1-9 Credits.

(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. 1-6 Credits.

(R?6) Offered autumn and spring. Course material appropriate to the needs and objectives of the individual student.

LATN 492 - Independent Study. 1-12 Credits.

(R?12) Offered intermittently. Course material appropriate to the needs and objectives of the individual student.

Law (LAW) < University of Montana

Law (LAW)

LAW 500 - Civil Procedure I. 3 Credits.

LAW 501 - Civil Procedures II. 4 Credits.

LAW 502 - Contracts. 4 Credits.

LAW 504 - Law Fund: T&P. 1 Credit.

LAW 505 - Law Fund: T & P. 2 Credits.

LAW 506 - Law Fund: Research. 2 Credits.

LAW 507 - Global Perspectives on Law. 5 Credits.

LAW 508 - Law Fund: Analysis. 1 Credit.

LAW 509 - Legal Writing. 3 Credits.

LAW 510 - Criminal Law. 3 Credits.

LAW 511 - Criminal Procedure. 3 Credits.

LAW 512 - Torts. 4 Credits.

LAW 515 - Election Law. 1-4 Credits.

LAW 519 - Enivro Negotiation Mediation. 3 Credits.

Same as COMX 515, ENST 515 and NRSM 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

LAW 520 - Wild Life Law. 3 Credits.

LAW 522 - Domestic Violence. 2 Credits.

LAW 523 - Juvenille Justice. 2 Credits.

LAW 524 - Legislation: Law & Politics. 3 Credits.

LAW 525 - Lawyers Values. 3 Credits.

LAW 526 - Business Tax II. 1-2 Credits.

LAW 527 - Amer Indian Cultural Preservat. 3 Credits.

LAW 528 - Adv Problems Natural Resc. 3 Credits.

LAW 529 - Tax Practice & Procedure. 2 Credits.

LAW 530 - Climate Change. 2 Credits.

LAW 533 - Civil rights Litigation. 2 Credits.

LAW 534 - Intellectual Property. 3 Credits.

LAW 537 - Law & Social Justice. 1 Credit.

LAW 538 - Art & Cultural Property. 2 Credits.

LAW 539 - International Environ Law. 3 Credits.

LAW 548 - Tax Practice & Procedure. 2 Credits.

LAW 549 - Environmental Crime. 2 Credits.

LAW 550 - Property. 4 Credits.

LAW 552 - Federal Tax. 3 Credits.

LAW 554 - Business Organizations. 3 Credits.

LAW 555 - Professional Responsibility. 3 Credits.

LAW 556 - Business Transactions. 3 Credits.

LAW 557 - Trial Practice. 2 Credits.

LAW 558 - Constitutional Law. 4 Credits.

LAW 560 - Evidence. 3 Credits.

LAW 564 - Law Review I. 1 Credit.

LAW 565 - Law Review II. 1 Credit.

LAW 579 - Tax Policy Seminar. 2 Credits.

LAW 580 - Corporate Tax. 2 Credits.

LAW 581 - Mediation Advocacy. 2 Credits.

LAW 595 - Special Topics. 1-6 Credits.

LAW 599 - Clinical Training II. 1-15 Credits.

LAW 600 - Clinical Trng III. 1-15 Credits.

LAW 601 - Clinical Trng IV. 1-15 Credits.

LAW 602 - Law Review III. 1-2 Credits.

LAW 603 - Law Review IV. 1-2 Credits.

LAW 604 - Adv Constitutional Law. 3 Credits.

LAW 605 - Animal Law. 2 Credits.

LAW 607 - Law and Literature. 1 Credit.

LAW 608 - Adv Leg Res Ac Writing. 2 Credits.

LAW 609 - UCC Article 2. 2 Credits.

LAW 610 - Adv Skills Competition. 1 Credit.

LAW 611 - Indian Law Research. 1 Credit.

LAW 613 - Nat Res Conflict Resolution. 3 Credits.

Offered autumn. Same as NRSM 513 and ENST 513. 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

LAW 614 - Alt Dispute Resolution. 3 Credits.

LAW 615 - Advanced Legal Research. 2 Credits.

LAW 616 - Appellate Advocacy. 3 Credits.

LAW 617 - Adv Prob Fed Indian Law. 3 Credits.

LAW 618 - Montana Constitut Law. 3 Credits.

LAW 619 - Amer Ind Natural Res Law. 3 Credits.

LAW 620 - Elder Law. 3 Credits.

LAW 621 - Bankruptcy. 3 Credits.

LAW 622 - Employment Law. 3 Credits.

LAW 624 - Insurance Law. 3 Credits.

LAW 625 - Gender and the Law. 1 Credit.

LAW 627 - Patent Law. 2 Credits.

LAW 628 - Remedies. 3 Credits.

LAW 629 - International Bus & Trade. 3 Credits.

LAW 630 - Lawyers' Values. 3 Credits.

LAW 631 - Law Practice. 2 Credits.

LAW 632 - Pub Reg of Bus:Securities. 2 Credits.

LAW 633 - Natural Resource Develop. 3 Credits.

LAW 634 - Public International Law. 3 Credits.

LAW 635 - Partnership Tax. 2 Credits.

LAW 636 - Secured Transactions. 3 Credits.

LAW 637 - Healthcare Law. 2 Credits.

LAW 638 - Client Counseling Team. 2 Credits.

LAW 639 - Tax of Business Entities. 3 Credits.

LAW 640 - Tax of Property Transact. 2 Credits.

LAW 641 - Negotiations. 2 Credits.

LAW 642 - Negotiation Team. 2 Credits.

LAW 643 - Am Ind Cult Religion Freedom. 3 Credits.

LAW 644 - White Collar Crime. 3 Credits.

LAW 645 - Consumer Law. 3 Credits.

LAW 646 - State and Local Government. 3 Credits.

LAW 648 - Federal Indian Law. 3 Credits.

LAW 649 - Adv Environmental Law. 3 Credits.

LAW 650 - Intro Envirolaw. 3 Credits.

LAW 651 - Oil and Gas Law. 3 Credits.

LAW 652 - Advanced Legislation. 3 Credits.

LAW 653 - Conflict of Laws. 2 Credits.

LAW 654 - Public Land & Res Law. 3 Credits.

LAW 655 - Taxation of Estates & Gifts. 3 Credits.

LAW 656 - Agricultural Law. 2 Credits.

LAW 657 - Products Liability. 3 Credits.

LAW 658 - Real Estate Transactions. 2 Credits.

LAW 659 - Estate Planning. 3 Credits.

LAW 660 - Independent Study. 1-4 Credits.

LAW 661 - Independent Study. 1-2 Credits.

LAW 662 - Workers' Compensation. 3 Credits.

LAW 663 - Water Law. 3 Credits.

LAW 664 - Philosophy of Law. 3 Credits.

LAW 665 - Administrative Law. 3 Credits.

LAW 666 - Moot Court. 1-2 Credits.

LAW 667 - Spec Tp:Immigration Law. 1-2 Credits.

LAW 668 - Disability Law. 1-2 Credits.

LAW 669 - Family Law. 3 Credits.

LAW 670 - Child Advocacy. 2 Credits.

LAW 671 - Federal Courts. 2 Credits.

LAW 672 - Alt Dispute Resol Fam Med. 3 Credits.

LAW 674 - Non-profit Organizations. 2 Credits.

LAW 675 - First Amendment Seminar. 2 Credits.

LAW 677 - Environmental Law Research. 1 Credit.

LAW 678 - Renewable Energy. 3 Credits.

LAW 679 - Collaborative Conservation. 1-3 Credits.

(R-4) Offered every semester. Same as ENST 579 and NRSM 579. Prereq., ENST 513, LAW 613, or NRSM 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: Law

LAW 680 - Contemporary Legal Studies. 1-6 Credits.

LAW 681 - Independent Study. 1-2 Credits.

LAW 682 - Copyright/Trademark Laws. 2 Credits.

LAW 683 - International Law Research. 1 Credit.

LAW 685 - Adv Trial Advocacy. 1 Credit.

LAW 686 - Adv Education Law Issues. 3 Credits.

LAW 687 - Land Use Planning Law. 3 Credits.

LAW 688 - Tribal Courts/Tribal Law. 3 Credits.

LAW 689 - Special Topics. 1-6 Credits.

LAW 690 - Adv Criminal Procedure. 3 Credits.

LAW 691 - Indian Child Welfare. 1 Credit.

LAW 694 - Tribal/State Relations. 2 Credits.

Legal Studies (LEG) < University of Montana

Legal Studies (LEG)

LEG 183 - Contracts. 2 Credits.

Offered spring. Offered at Missoula College. 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 184E - Legal Ethics. 3 Credits.

Offered autumn. Offered at Missoula College. Introduction to ethical topics in the legal field, including confidentiality, professional relationships, fee arrangements, codes of professional conduct, attorney-client privilege, fiduciary responsibilities, and public service. The course will include a general introduction to the development of ethical concepts within the legal profession and the justice system.

Gen Ed Attributes: Ethical & Human Values Course

LEG 185 - Introduction Paralegal Studies. 2 Credits.

Offered autumn. Offered at Missoula College. 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. 2 Credits.

Offered autumn. Offered at Missoula College. 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. 2 Credits.

Offered spring. Offered at Missoula College. 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. 2 Credits.

Offered spring. Offered at Missoula College. Prereq., consent of instructor. 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. 3 Credits.

Offered spring. Offered at Missoula College. Prereq., consent of instructor. 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. 1-6 Credits.

(R-6) Offered every term. Offered at Missoula College. Prereq., consent of instructor. Course material appropriate to the needs and objectives of the individual student.

LEG 195 - Special Topics. 1-6 Credits.

LEG 196 - Independent Study. 1-6 Credits.

(R-6) Offered intermittently. Offered at Missoula College. Course material appropriate to the needs and objectives of the individual student.

LEG 270 - Civil Litigation. 3 Credits.

Offered autumn. Offered at Missoula College. Prereq., LEG 185 or consent of instructor. 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 272 - Computers & Law. 3 Credits.

Offered at Missoula College. Prereq., CAPP 120 and LEG 185 or consent of instructor. This course provides an introduction to the growing use of computer technology in law offices. Topics will include using established and developing technologies to address issues such as metadata, online office suites, online storage, Google Apps tools, word processing, spreadsheets, database, calendar, task lists, Bates stamping, online and in-office security, case management, optical character recognition & PDF document storage, operating systems, computers, scanners, online security, sale of providers, instant messaging, email, social media, courtroom presentations, discovery, document review, websites, online advertising, collaborative document editing, client billing, client trust account management, payroll, speech recognition, networking systems, cloud computing, remote desktop programs, and scheduling programs.

LEG 282 - Contemporary Legal Issues. 3 Credits.

Offered spring. Offered at Missoula College. Prereq., LEG 270 or consent of instructor. 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. 3 Credits.

Offered spring. Offered at Missoula College. Prereq., LEG 270 or consent of instructor. 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. 3 Credits.

Offered spring. Offered at Missoula College. Prereq., LEG 286 or consent of instructor. 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. 2 Credits.

Offered autumn. Offered at Missoula College. Prereq., LEG 186 and 187. 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. 2 Credits.

Offered spring. Offered at Missoula College. 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. 2 Credits.

Offered spring. Offered at Missoula College. Prereq., LEG 286 or consent of instructor. 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. 1-6 Credits.

(R-6) Offered intermittently. Offered at Missoula College. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

LEG 292 - Independent Study. 1-6 Credits.

(R-6) Offered every term. Offered at Missoula College. Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student.

LEG 295 - Special Topics. 1-6 Credits.

LEG 298 - Paralegal Studies Internship. 2 Credits.

Offered autumn and spring. Offered at Missoula College. 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.

Library Science (LSCI) < University of Montana

Library Science (LSCI)

LSCI 191 - Special Topics. 1-6 Credits.

(R-6) Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

LSCI 192 - Independent Study. 1-6 Credits.

(R-6) Prereq., consent of instructor. Course material appropriate to the needs and objectives of the individual student.

LSCI 200 - Research Strategies. 1 Credit.

Offered every term. Introduces on-campus and distant students to academic library research methods and resources with a focus on remote access and services for distant students. Explores all steps of academic research including how to find information and use critical thinking to evaluate sources.

LSCI 210Y - Who Owns Culture? An Introduction to Copyright. 3 Credits.

Students will learn how copyright affects their rights and responsibilities in creative processes as well as access to information.

Gen Ed Attributes: Democracy and Citizenship (Y)

LSCI 291 - Special Topics. 1-6 Credits.

(R-6) Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

LSCI 292 - Independent Study. 1-6 Credits.

(R-6) Prereq., consent of instructor. Course material appropriate to the needs and objectives of the individual student.

LSCI 391 - Special Topics. 1-9 Credits.

(R-9) Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

Gen Ed Attributes: Writing Course-Intermediate

LSCI 392 - Independent Study. 1-9 Credits.

(R-9) Prereq., consent of instructor. Course material appropriate to the needs and objectives of the individual student.

LSCI 398 - Internship. 1-6 Credits.

(R-6) 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.

LSCI 491 - Special Topics. 1-12 Credits.

(R-12) Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

LSCI 492 - Independent Study. 1-9 Credits.

(R-9) Prereq., consent of instructor. Course material appropriate to the needs and objectives of the individual student.

LSCI 498 - Internship. 1-6 Credits.

(R-6) 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.

LSCI 595 - Special Topics. 1-9 Credits.

(R-9) Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. Level: Graduate

LSCI 596 - Independent Study. 1-9 Credits.

(R-9) Prereq., consent of instructor. Course material appropriate to the needs and objectives of the individual student. Level: Graduate

LSCI 598 - Internship. 1-6 Credits.

(R-6) 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.

Linguistics (LING) < University of Montana

Linguistics (LING)

LING 191 - Special Topics. 1-6 Credits.

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

LING 198 - Internship. 1-6 Credits.

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.

LING 270S - Intro to Linguistics. 3 Credits.

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.

Gen Ed Attributes: Social Sciences Course (S)

LING 375X - Linguistic Ecology and Language Endangerment. 3 Credits.

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.

Gen Ed Attributes: Writing Course-Intermediate, Cultural Intl Diversity (X)

LING 391 - Special Topics. 1-9 Credits.

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

LING 398 - Internship. 1-6 Credits.

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.

LING 465 - Structure & History of English. 3 Credits.

Offered once 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 470 - Linguistic Analysis. 3 Credits.

Offered autumn. 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. 3 Credits.

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.

LING 472 - Syntax. 3 Credits.

Offered autumn. Prereq., LING 470. 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.

LING 473 - Language and Culture. 3 Credits.

Offered spring. Prereq., WRIT 101 or equivalent, and one intermediate writing course and LING 470. Technical study of the relationships between grammatical categories and world view. This course co-convenes with LING 573.

Gen Ed Attributes: Writing Course-Advanced

LING 474 - Historical Linguistics. 3 Credits.

Offered spring, even-numbered years. 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.

LING 475 - Linguistic Field Methods. 3 Credits.

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.

LING 477 - Bilingualism. 3 Credits.

Offered autumn. Prereq., LING 270S or LING 470. Societal and individual bilingualism: topics include language policy, maintenance, interference, code-switching and mixing, and bilingual education.

LING 478 - Learner Language. 3 Credits.

Offered spring, odd-numbered years. Prereq., LING 270S or LING 470. Observing/describing language learners' behaviors and, to a degree, advances toward proficiency (i.e., fluency plus accuracy); the presence of error as conditioned by a priori knowledge of language and implications for child and adult development; and applying typical methods of linguistic analysis to the (non-) systematic variants in language form characterizing developmental processes as a way of trying to explain variable behavior.

LING 480 - Tchg Engl as For Lang. 3 Credits.

Offered autumn online. 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 484 - NA Indigenous Lang & Ling. 3 Credits.

Offered autumn odd-numbered years. Prereq., WRIT 101 or equivalent, and one intermediate writing course and LING 470. Description and analysis of grammatical features of Indigenous languages of North America. This course co-convenes with LING 584.

Gen Ed Attributes: Writing Course-Advanced

LING 489 - Morphology. 3 Credits.

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.

LING 491 - Special Topics. 1-6 Credits.

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

LING 492 - Independent Study. 1-9 Credits.

(R-9) Offered intermittently. Prereq., consent of instr. Special projects in linguistic analysis.

LING 494 - Seminar. 1-6 Credits.

(R-6) Offered intermittently. Prereq., LING 270 or LING 470. A review and discussion of advanced topics covering descriptive linguistics, linguistic theory and subjects related to the analysis of human languages.

LING 495 - ESL Practicum. 1-3 Credits.

Offered autumn and spring. Prereq., or coreq., LING 480. Offered every term. Students with a teaching major take the course for 3 credits; others take it for 1 credit and do one third of the work.

LING 498 - Internship. 1-6 Credits.

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.

LING 559 - Preceptorship. 1 Credit.

(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. 3 Credits.

(R-12) Offered autumn and spring. Advanced topics in linguistic analysis. Level: Graduate

LING 571 - Phonetics and Phonology. 3 Credits.

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

LING 572 - Syntax. 3 Credits.

Offered autumn. Prereq., LING 470 or equivalent. An investigation of human language sentence?formation systems, construed as functions (combinatorial computations) mapping utterances (physical sounds) to propositions (mental meanings). Emphasis on abstracting away from observable cross-linguistic data in favor of underlying formal (i.e., computational) structures. This course is co-convened with LING 472. Level: Graduate

LING 573 - Language and Culture. 3 Credits.

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

LING 574 - Historical Linguistics. 3 Credits.

Offered spring even-numbered years. 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

LING 575 - Linguistic Field Methods. 3 Credits.

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 courses co-convenes with LING 475. Graduate students will complete additional requirements and their work will be of a more advanced nature. Level: Graduate

LING 584 - NA Indigenous Lang and Ling. 3 Credits.

Offered autumn odd-numbered years. 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

LING 589 - Morphology. 3 Credits.

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

LING 595 - Special Topics. 1-9 Credits.

(R?9) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. Level: Graduate

LING 596 - Independent Study. 1-3 Credits.

(R-6) Offered intermittently. Course material appropriate to the needs and objectives of the individual student. Level: Graduate

LING 598 - Internship. 1-6 Credits.

(R-6) Offered intermittently. Extended classroom experience which provides practical application of classroom learning during placements off campus. Level: Graduate

LING 599 - Professional Paper. 1-6 Credits.

(R-6) Offered intermittently. Preparation of a professional paper appropriate to the needs and objectives of the individual student. Level: Graduate

LING 699 - Thesis. 1-6 Credits.

(R-6) Offered autumn and spring. Preparation of a thesis or manuscript based on research for presentation and/or publication. Level: Graduate

MBA < University of Montana

MBA

MBA 603 - Integrated Project. 1 Credit.

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. 1-12 Credits.

(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. 1-12 Credits.

(R-12) Offered every term. Prereq., admission to the M.B.A. or MAcct. 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. 1-9 Credits.

(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. 1-15 Credits.

(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. 1-6 Credits.

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

MBA 696 - Independent Study. 1-9 Credits.

(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. 1-3 Credits.

(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. 1-6 Credits.

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

Management Information Systems (MIS) < University of Montana

Management Information Systems (MIS)

MIS 260 - Life and Health Insurance. 3 Credits.

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. 1 Credit.

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. 1 Credit.

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.. 3 Credits.

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. 1 Credit.

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. 1 Credit.

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. 1 Credit.

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.

Mansfield Center (MANS) < University of Montana

Mansfield Center (MANS)

MANS 103 - Intermediate Persian-Farsi I. 5 Credits.

The Persian-Farsi language belongs to category III languages as defined by the DLIFLC (Defense Language Institute Foreign Language Center). This course is designed for students who have reached the proficiency level 1/1 on the ILR scale (Interagency Language Roundtable) in Persian-Farsi. The goal of the course is to equip students with listening, speaking and reading skills in Persian-Farsi to sustain their proficiency level and/or achieve a 1+/1+ on their OPI. This course is designed to help students develop effective skills in communicating via the Persian-Farsi language in a wide range of topics. The course focuses on Modern Standard Persian-Farsi as well as the Tehrani dialect of Persian language. Students will be equipped with the necessary skills to understand, speak, (possibly) read and write in Persian-Farsi at an intermediate level. Furthermore, students will also be well-versed in the strategic cultures of Iran and the region and will develop a deeper understanding of the key historical and political trends in the region.

MANS 104 - Intermediate Levantine Arabic I. 5 Credits.

This is a five credit course, with six 50-minute classes a day, daily written and oral exercises and homework. The class meets for 6 weeks for a total of 168-180 contact hours in class. Two (2) contact hours each week are dedicated for cultural class (lectures on the cultures, politics, and history of the Middle East). In addition, students spend 2 hours out of class each day for self-study and homework.

MANS 105 - Intermediate Modern Standard Arabic I (MSA). 5 Credits.

This DCLCP course is designed to meet DoD (Department of Defense) Total Force MSA language training needs, with an emphasis on the fifth group language training needs (Fort Campbell, Kentucky) in order to improve their language, regional, and cultural expertise. As a part of DoD Language Training Center, the course is open exclusively for U.S. DoD personnel who would not otherwise enroll in other University of Montana language courses. Nonetheless, the DCLCP does encourage its students to pursue degrees in University programs like Middle Eastern Studies, or Political Science offered by the University of Montana. The Modern Standard Arabic language belongs to category IV languages as defined by the DLIFLC (Defense Language Institute Foreign Language Center). This Intermediate MSA course is designed for students who have reached the proficiency level 1/1 on the ILR scale (Interagency Language Roundtable). The goal of the course is to equip students with communicative skills in listening, speaking, and reading at the upper-intermediate/advanced level in the Modern Standard Arabic language.

MANS 106 - Elementary Indonesian. 5 Credits.

Indonesian language belongs to category II languages as defined by the DLIFLC (Defense Language Institute Foreign Language Center). The Elementary Indonesian Course is designed for those students who are in their initial Indonesian language acquisition level. Student knowledge can vary from `zero` (or no knowledge of the language) to some elementary skills in the target language. The course is organized by topics, grammar points and cultural notes. Students develop fluency of comprehension and oral skills to express their needs as well as simple ideas about family, hobbies, jobs, and daily activities. The classes mainly consist of three components: listening, reading, and speaking. There are some writing tasks as optional assignments. At the end of each week, students are given quizzes to recapitulate what they have acquired during the week. Quizzes include DLPT5-like mock tests (Defense Language Proficiency Test 5), OPI (Oral Proficiency Interview), and written tests.

MANS 107 - Elementary Korean I. 5 Credits.

The Defense Critical Language and Culture Program (DCLCP) (of The University of Montanas 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).

MANS 108 - Elementary Chinese I. 5 Credits.

The Defense Critical Language and Culture Programs 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 Peoples 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 195 - Special Topics. 1-6 Credits.

(R-12) Offered intermittently. Prereq., consent of instr. Experimental offerings of new courses or one-time offerings of current topics.

MANS 203 - Intermediate Persian-Farsi II. 4 Credits.

This course is designed to help students develop effective skills in communicating via the Persian-Farsi language in a wide range of topics. The students will be able to understand face-to-face speech in a standard dialect, delivered at a normal rate by a native speaker. Students will have sufficient comprehension to read simple, authentic written material on subjects within a familiar context. They will locate and understand the main ideas and details in videos and news broadcasts for the general Persian speaking public. Students will also be able to comprehend social, political and cultural customs and norms of Iran as well as the region. To achieve the above-mentioned goals, the course utilizes a functional/thematic based approach to help language learners gain rich meaningful knowledge of the target language and culture. It focuses on effective and meaningful communication to refine and improve students accuracy and fluency as well as comprehension and production through engaging them in meaningful tasks and functions. The classes focus mainly on active participation of the learners in various meaningful students-centered tasks: student presentations, group discussions, students teaching their culture to the instructors, and students teaching the target language to their classmates as teacher assistants. At the end of each week, students are given quizzes to recapitulate what they have acquired during the week. Quizzes include both written and oral tests (OPI and DLPT-like tests, Oral Proficiency Interview and Defense Language Proficiency Test, respectively).

MANS 204 - Intermediate Levantine Arabic II. 4 Credits.

This DCLCP course is designed to meet DoD (Department of Defense) Total Force Levantine Arabic language training needs, with an emphasis on the fifth group language training needs (Fort Campbell, Kentucky) in order to improve their language, regional, and cultural expertise. As a part of DoD Language Training Center, the course is open exclusively for U.S. DoD personnel who would not otherwise enroll in other University of Montana language courses. Nonetheless, the DCLCP does encourage its students to pursue degrees in University programs like Middle Eastern Studies, or Political Science offered by the University of Montana. The Levantine Arabic language belongs to category IV languages as defined by the DLIFLC (Defense Language Institute Foreign Language Center). This Intermediate Levantine Arabic course is designed for students who have Completed MANS-295 Intermediate Levantine Arabic I. The goal of the course is to equip students with communicative skills in listening, speaking, and reading at the upper-intermediate/advanced level in the Levantine Arabic language.

MANS 205 - Intermediate Modern Standard Arabic II (MSA). 4 Credits.

This DCLCP course is designed to meet DoD (Department of Defense) Total Force Modern Standard Arabic language training needs, with an emphasis on the fifth group language training needs (Fort Campbell, Kentucky) in order to improve their language, regional, and cultural expertise. As a part of DoD Language Training Center, the course is open exclusively for U.S. DoD personnel who would not otherwise enroll in other University of Montana language courses. Nonetheless, the DCLCP does encourage its students to pursue degrees in University programs like Middle Eastern Studies, or Political Science offered by the University of Montana. The Modern Standard Arabic language belongs to category IV languages as defined by the DLIFLC (Defense Language Institute Foreign Language Center). This Intermediate MSA course is designed for students who have Completed MANS 105 Intermediate Modern Standard Arabic I. The goal of the course is to equip students with communicative skills in listening, speaking, and reading at the upper-intermediate/advanced level in the Modern Standard Arabic language.

MANS 206 - Intermediate Indonesian Language and Culture. 5 Credits.

This DCLCP course is designed to meet DoD (Department of Defense) Total Force Indonesian language training needs, with an emphasis on the 1st Special Forces Group (Joint Base Lewis McChord, WA) in order to improve their 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 in other University of Montana language courses. Nonetheless, the DCLCP does encourage its students to pursue degrees in University programs like East Asian Studies, Central Asian Studies, or political science after their discharge from the armed forces.

MANS 207 - Intermediate Korean I. 5 Credits.

The Defense Critical Language and Culture Program (DCLCP) (of The University of Montanas 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).

MANS 208 - Intermediate Chinese I. 5 Credits.

The Defense Critical Language and Culture Programs 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.

MANS 295 - Special Topics. 1-6 Credits.

(R-12) Offered intermittently. Prereq., consent of instr. Experimental offerings of new courses or one-time offerings of current topics.

MANS 296 - Independent Study. 1-6 Credits.

(R-6) Offered intermittently.

MANS 306 - Advanced Indonesian Language and Culture. 5 Credits.

This DCLCP course is designed to meet DoD (Department of Defense) Total Force Indonesian language training needs, with an emphasis on the 1st Special Forces Group (Joint Base Lewis McChord, WA) in order to improve their language, regional, and cultural expertise. As a part of DoD Language Training Center, the course is open exclusively for U.S. DoD personnel who would not otherwise enroll in other University of Montana language courses. Nonetheless, the DCLCP does encourage its students to pursue degrees in University programs like East Asian Studies, Central Asian Studies, or political science after their discharge from the armed forces

MANS 307 - Advanced Korean I. 5 Credits.

The Defense Critical Language and Culture Program (DCLCP) (of The University of Montanas 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).

MANS 308 - Advanced Chinese I. 5 Credits.

The Defense Critical Language and Culture Programs 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 Peoples 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. 1-9 Credits.

(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.

MANS 398 - Internship. 1-6 Credits.

MANS 494 - Mansfield Center Seminar. 1-9 Credits.

(R-9) Offered intermittently. Prereq., consent of instr. A review and discussion of current research. Topics vary.

MANS 495 - Special Topics. 1-9 Credits.

(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. 1-6 Credits.

(R-6) Offered intermittently. Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student.

MANS 595 - Special Topics. 1-12 Credits.

(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

Mathematics (M)

M 065 - Prealgebra. 3 Credits.

Offered every term. Offered at Missoula College. 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

M 090 - Introductory Algebra. 3 Credits.

Offered every term. Offered at Missoula College. Prereq., M 065 or appropriate math placement score. 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. 3 Credits.

Offered autumn and spring. Offered at Missoula College. Prereq., M 090 or appropriate math placement score. 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 104 - Numbers as News. 3 Credits.

Offered spring. Prereq. M 090 with a grade of B- or better, or M 095, or ALEKS placement >= 3, M01-Maplesoft Arithmetic score >= 16 or ACT score of 22, or SAT score of 520. An exploration of mathematics and statistics as used in the popular media. For students in the School of Journalism only.

Gen Ed Attributes: Math Competency Course

M 105 - Contemporary Mathematics. 3 Credits.

Offered every term. Prereq., M 090 with a grade of RC- or better, or M 095, or ALEKS placement >= 3, or M01-Maplesoft Arithmetic score >= 16, or ACT score of 22, or SAT score of 520. An introduction to mathematical ideas and their impact on society. Intended for students wishing to satisfy the general education mathematics requirement.

Gen Ed Attributes: Math Competency Course

M 111 - Technical Mathematics. 3 Credits.

Offered autumn and spring. Offered at Missoula College. 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.

Gen Ed Attributes: Math Competency Course

M 115 - Probability and Linear Mathematics. 3.000 Credits.

Offered every term. Prereq., M 090 with a grade of RC- or better, or M 095, or ALEKS placement >= 3 or M01-Maplesoft Arithmetic score >= 16, or ACT score of 22, or SAT score of 520. 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.

Gen Ed Attributes: Math Competency Course

M 118 - 118 Mathematics for Music Enthusiasts. 3 Credits.

Offered autumn and/or spring. Prereq. M 090 with a grade of B- or better, or M 095, or ALEKS placement >= 3, or M01-Maplesoft Arithmetic score >= 18, or ACT score of 22, or SAT score of 520; 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.

Gen Ed Attributes: Math Competency Course

M 121 - College Algebra. 3 Credits.

Offered autumn and spring. Prereq., M 095 or ALEKS placement >= 4 or M02-Maplesoft Algebra score >= 14. 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.

Gen Ed Attributes: Math Competency Course

M 122 - College Trigonometry. 3 Credits.

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.

Gen Ed Attributes: Math Competency Course

M 132 - Numbers and Operations for Elementary School Teachers. 3 Credits.

Offered autumn and spring. Prereq., M 095 or M 115, or ALEKS placement >= 4 or M02-Maplesoft Algebra score >= 14. 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.

Gen Ed Attributes: Math Competency Course

M 133 - Geometry and Measurement for Elementary School Teachers. 3 Credits.

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.

Gen Ed Attributes: Math Competency Course

M 140 - College Math For Healthcare. 3 Credits.

Offered autumn and spring at Missoula College. This course is designed to provide students with a solid mathematical foundation necessary to succeed in a health care profession. This course will review algebra, systems of measurement, ratio and proportions, basic probability and statistics concepts, and Ionic solutions and pH calculations. This course will apply mathematical reasoning and problem solving as it applies to the healthcare field.

M 151 - Precalculus. 4 Credits.

Offered autumn and spring. Prereq., ALEKS placement >= 4 or M02-Maplesoft Algebra score >= 17. A one semester preparation for calculus (as an alternative to M 121 - M 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 M 122.

Gen Ed Attributes: Math Competency Course

M 162 - Applied Calculus. 4.000 Credits.

Offered autumn and spring. Prereq., ALEKS placement >= 5 or M02-Maplesoft Algebra score >= 19 or M03-Maplesoft Calculus score >= 10 or one of M 121, M 122 or M 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.

Gen Ed Attributes: Math Competency Course

M 171 - Calculus I. 4 Credits.

Offered autumn and spring. Prereq., M 122 or M 151 or ALEKS placement >= 5 or M03-Maplesoft Calculus score >= 15. 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.

Gen Ed Attributes: Math Competency Course

M 172 - Calculus II. 4 Credits.

Offered autumn and spring. Prereq., M 171 or M 181. Techniques of Integration. Area computations. Improper integrals. Infinite series and various convergence tests. Power series. Taylor's Formula. Polar coordinates. Parametric curves.

Gen Ed Attributes: Math Competency Course

M 181 - Honors Calculus I. 4 Credits.

Offered autumn. Offered autumn and spring. Prereq., Prereq., M 122 or M 151 or ALEKS placement >= 5 or M03-Maplesoft Calculus score >= 15. Honors version of M 171.

Gen Ed Attributes: Math Competency Course

M 182 - Honors Calculus II. 4 Credits.

Offered spring. Prereq., M 181 or consent of instr. Honors version of M 172.

Gen Ed Attributes: Math Competency Course

M 191 - Special Topics. 1-6 Credits.

(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. 1-6 Credits.

(R-6) Offered intermittently. Course material appropriate to the needs and objectives of the individual student.

M 210 - Introduction to Mathematical Software. 3 Credits.

Offered spring. Prereq., one of M 162, M 171, or M 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. 4 Credits.

Offered autumn and spring. Prereq., M 172 or M 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. 3 Credits.

Offered autumn. Prereq., one of M 162, M 171, or M 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 M 225.

M 234 - Higher Mathematics for Elementary School Teachers. 3 Credits.

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 263 - Applied Differential Equations. 3 Credits.

Offered spring. Prereq., one of M 162, M 171 or M 181 and knowledge of basic trigonometry. Solution of ordinary differential equations and systems with emphasis on applications, numerical methods and computer software.

M 273 - Multivariable Calculus. 4 Credits.

Offered autumn and spring. Prereq., M 172 or M 182. Calculus of functions of several variables; differentiation and elementary integration. Vectors in the plane and space.

M 291 - Special Topics. 1-3 Credits.

(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. 1-9 Credits.

(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. 1-9 Credits.

(R-9) Offered intermittently. Prereq., consent of instr.

M 295 - Practicum. 1-6 Credits.

M 300 - Undergraduate Mathematics Seminar. 1 Credit.

(R-3) Offered every semester. Prereq., M 171 or M 181. Discussion seminar focused on topics and issues of interest to students in the mathematical sciences.

M 301 - Teaching Mathematics with Technology. 3 Credits.

Offered autumn, odd-numbered years. Prereq., M 221. Discrete and continuous mathematical models from a variety of disciplines using appropriate technology.

M 307 - Introduction to Abstract Mathematics. 3 Credits.

Offered autumn and spring. Prereq., M 172 or M 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 M 307 are encouraged to take M 221 first.

M 311 - Ordinary Differential Equations and Systems. 3 Credits.

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. 1 Credit.

Offered autumn. Coreq., M 311 or consent of instr. Intended primarily for student in M 311.

M 325 - Discrete Mathematics. 3 Credits.

Offered intermittently. Prereq., M 171 and M 225 or M 307. Continuation of M 225 and topics from graph theory, Boolean algebras, automata theory, coding theory, computability and formal languages.

M 326 - Number Theory. 3 Credits.

Offered spring. Prereq., M 225 or M 307. Congruences, Diophantine equations, properties of primes, quadratic residues, continued fractions, algebraic numbers.

M 361 - Discrete Optimization. 3 Credits.

Offered spring. Prereq., one of M 162, M 172 or M 182 (M 221 or M 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. 3 Credits.

Offered autumn. Prereq., one of M 162, M 172 or M 182 (M 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. 1 Credit.

Offered autumn. Coreq., M 362. Introduction to linear optimization software.

M 381 - Advanced Calculus I. 3 Credits.

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. 1-9 Credits.

(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. 1-9 Credits.

(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. 1-9 Credits.

(R-9) Offered autumn and spring. Prereq., consent of instr.

M 398 - Internship. 1-6 Credits.

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.

M 412 - Partial Differential Equations. 3 Credits.

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. Level: Undergraduate-Graduate

M 414 - Deterministic Models. 3 Credits.

Offered spring. Prereq., M 263 or M 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. Level: Undergraduate-Graduate

M 418 - Partial Differential Equations Computer Lab. 1 Credit.

Offered spring. Coreq., M 412 or consent of instr. Intended primarily for students in M 412. Level: Undergraduate-Graduate

M 429 - History of Mathematics. 3 Credits.

Offered spring. Prereq., WRIT 101 or equivalent, one intermediate writing course and M 307. Historical study of the development of mathematics from the Egyptian and Babylonian eras to the 20th century. Level: Undergraduate-Graduate

Gen Ed Attributes: Writing Course-Advanced

M 431 - Abstract Algebra I. 4 Credits.

Offered autumn. Prereq., M 221 and M 307 or consent of instr. An introduction to modern ideas of algebra through the study of groups, rings, and fields. Level: Undergraduate-Graduate

M 432 - Abstract Algebra II. 4 Credits.

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. Level: Undergraduate-Graduate

M 439 - Euclidean and NonEuclidean Geometry. 3 Credits.

Offered autumn. Prereq., M 307. Euclidean geometry from a rigorous, axiomatic viewpoint and Non?Euclidean geometries chosen from Lobachevskian, projective, finite and Riemannian. Level: Undergraduate-Graduate

M 440 - Numerical Analysis. 4 Credits.

Offered in Autumn. Prereq., M 221, M 311, and some experience with computer programming. Topics include: error analysis; approximation and interpolation; numerical solution of linear and non-linear equations; numerical optimization; numerical integration of ordinary and partial differential equations; and applications. Level: Undergraduate

M 445 - Statistical, Dynamical, and Computational Modeling. 4 Credits.

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. Level: Undergraduate-Graduate

M 461 - Data Science Analytics. 3 Credits.

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 of data analytics. The content consists of data dictionaries and data mappings, distributed computing, and related methods. Other topics may include data visualization, regression, and cluster analysis. This course may be used to satisfy the course requirements of the Big Data Certificate Program. Level: Undergraduate. Co-convenes with M 561.

M 462 - Theoretical Basics of Big Data Analytics and Real Time Computation Algorithms. 3 Credits.

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. Level: Undergraduate

M 467 - Data Science Projects. 3 Credits.

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 data science 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. Level: Undergraduate. Co-convenes with M 567.

M 472 - Introduction to Complex Analysis. 4 Credits.

Offered spring. Prereq., M 273, M 307. Analytic functions, complex integration, singularities and application to contour integration, harmonic functions, spaces of analytic functions. Level: Undergraduate-Graduate

M 473 - Introduction to Real Analysis. 4 Credits.

Offered autumn odd-numbered years. Prereq., M 273 and 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. Level: Undergraduate-Graduate

M 485 - Graph Theory. 3 Credits.

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. Level: Undergraduate-Graduate

M 490 - Undergraduate Research. 1-4 Credits.

(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. 1-9 Credits.

(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. Level: Undergraduate-Graduate

M 492 - Independent Study. 1-9 Credits.

(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. 1-9 Credits.

(R-9) Offered autumn and spring. Prereq., consent of instr.

M 498 - Internship. 1-6 Credits.

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.

M 499 - Senior Thesis. 1-12 Credits.

(R-12) Offered autumn and spring. Prereq., WRIT 101 or equivalent, and one intermediate writing course and consent of instr. Senior thesis for mathematics majors and/or Watkins Scholars.

Gen Ed Attributes: Writing Course-Advanced

M 500 - Current Mathematical Curricula. 3 Credits.

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. 3 Credits.

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 Mathematics Education. 1-12 Credits.

(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. 3 Credits.

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. 3 Credits.

Offered autumn odd?numbered years. Prereq., M 311, and M 412 or M 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. 3 Credits.

Offered spring even?numbered years. Prereq., M 511. Continuation of M 511. Level: Graduate

M 514 - Topics in Applied Mathematics. 1-12 Credits.

(R-12) Offered autumn even?numbered years. Prereq., consent of instr. or M 511 and M 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. 3 Credits.

Offered alternate years in autumn. Recommended prereq., M 432 or consent of instr. Topics covered include group theory, field theory and Galois theory. Level: Graduate

M 522 - Advanced Algebra II. 3 Credits.

Offered alternate years in spring. Prereq., M 521 or consent of instr. Continuation of M 521; rings, modules, commutative algebra, and further topics. Level: Graduate

M 524 - Topics in Algebra. 3 Credits.

(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 531 - Topology. 3 Credits.

Offered autumn even-numbered years. Prereq., M 473 or consent of instr. Set theory, topological spaces, metrizability, continuous mappings and selected topics. Level: Graduate

M 532 - Algebraic Topology. 3 Credits.

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 540 - Numerical Methods for Computational & Data Science. 3 Credits.

Prereq., M 221, M 311, and some experience with computer programming. Topics include: error analysis; approximation and interpolation; numerical solution of linear and non-linear equations; numerical optimization; numerical integration of ordinary and partial differential equations. This course will focus specifically on techniques from numerical analysis that have applications in modern computational and data science. Students will be expected to learn the theoretical underpinnings of the methods they use, as well as to implement the methods in computer code. Level: Graduate

M 551 - Real Analysis. 3 Credits.

Offered spring even-numbered years. Prereq., M 473 or M 472 or consent of instr. Measure theory, abstract integration theory, theory of Lp-spaces. Level: Graduate

M 555 - Functional Analysis. 3 Credits.

Offered spring odd-numbered years. Prereq., M 473 or M 472 or consent of instr. Normed linear spaces, linear functionals, separation theorems, topological linear spaces, weak topologies, dualities. Level: Graduate

M 561 - Advanced Data Science Analytics. 3 Credits.

Offered autumn. Prereq., STAT 341 or STAT 421 and at least two upper division math courses. Topics include: data mappings and data reduction, scalable algorithms and associative statistics, Hadoop and MapReduce, data visualization, linear regression methods, healthcare analytics and cluster analysis. Level: Graduate. Co-convenes with M 461.

M 562 - Advanced Theoretical Big Data Analytics. 3 Credits.

Offered spring. Prereq., M 540 and M 561. Topics include: The notion of canonical information, linear experiment and optimal estimation problem, manipulating information in different forms: raw vs. explicit vs. canonical, Gauss-Markov theorem,calibration problem; real time signal processing with finite and infinite field of view.time series processing; balancing estimation accuracy, delay and computational demands.Image processing with infinite field of view; parallel processing of signals and images. Level: Graduate

M 564 - Topics in Analysis. 3 Credits.

(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 567 - Advanced Big Data Analytics Projects. 3 Credits.

Offered spring. Prereq., two courses chosen from STAT 341, M 221 and M 273, and one of M 461 or M 462. In this course, local businesses and University researchers will contribute practical problems from data science to the class. Students will learn how to work in teams to develop solutions to the contributed problems, graduate students will serve as lead investigators on these teams. Learning outcomes include: Develop data reduction algorithms for complex problems and varied data. Apply mathematical, statistical, and computational methods used in solving big data problems. Extend and adapt core algorithms to specific problems. Work with a client towards understanding client objectives and meeting the objectives. Propose alternative paths towards the solution when necessary. Plan a project (determine what is realistic and achievable within a time frame). Document progress and elicit feedback from clients. Write concise and focused progress reports. Efficiently allocate workload among team members. Effectively communicate and participate as a team member. Level: Graduate. Co-convenes with M 467.

M 570 - Calculus for Teachers. 3 Credits.

Offered online in even-year summers. Prereq., teacher certification or consent of instr. Math knowledge for teaching concepts that support the learning of calculus across grades 5-12. The content focus is differential and integral calculus. The pedagogical focus is teaching calculus concepts through active investigation and problem solving. Level: Graduate

M 572 - Algebra for Teachers. 3 Credits.

Offered online in even-year summers. Prereq., teacher certification or consent of instr. Math knowledge for teaching algebra across grades 5-12. The pedagogical focus is algebraic thinking and how it develops across the grades through problem solving. The content focus is algebraic number fields, functions, linear algebra, and polynomials. Level: Graduate

M 573 - Geometry For Teachers. 3 Credits.

Offered online in odd-year summers. Prereq., teacher certification or consent of instr. Math knowledge for teaching geometry across grades 5-12 . The pedagogical focus is on geometric thinking and how it develops across grades 5-12 through problem solving. The content focus is synthetic, analytic, vector, and transformational approaches to geometry. Level: Graduate

M 574 - Probability and Statistics for Teachers. 3 Credits.

Offered online in odd-year summers. Prereq., teacher certification or consent of instr. Math knowledge for teaching probability and statistics across grades 5-12. The pedagogical focus is on understanding statistical thinking and its development through statistical problem solving. The content focus is developing statistical models to answer statistical questions. Level: Graduate

M 581 - Combinatorics. 3 Credits.

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. 3 Credits.

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. 3 Credits.

(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. 1-6 Credits.

(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

M 595 - Special Topics. 1-12 Credits.

(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

M 596 - Independent Study. 1-12 Credits.

(R-12) Offered autumn and spring. Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student. Level: Graduate

M 597 - Research. 1-12 Credits.

(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. 1-12 Credits.

(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

M 599 - Thesis. 1-6 Credits.

(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. 1-3 Credits.

(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. 3 Credits.

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. 3 Credits.

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. 3 Credits.

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. 3 Credits.

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. 1-12 Credits.

(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. 1-12 Credits.

(R-12) Offered autumn and spring. Prereq., consent of instr. Level: Graduate

M 650 - Graduate Seminar in Analysis. 1-12 Credits.

(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. 1-12 Credits.

(R-12) Offered autumn and spring. Prereq., consent of instr. A review and discussion of current research. Level: Graduate

M 690 - Supervised Internship. 1-12 Credits.

(R-6) Offered autumn and spring. Prereq., consent of department. Supervised Teaching Internship. Level: Graduate

M 691 - Practicum. 3 Credits.

Prereq., consent of instr. Resources for learning of reported research, critical reviews of research, quantitative and qualitative processes. Level: Graduate

M 694 - Seminar. 1-12 Credits.

(R-12) Offered autumn and spring. Prereq., consent of instr. A review and discussion of current research. Topics vary. Level: Graduate

M 695 - Special Topics. 1-9 Credits.

M 699 - Dissertation. 1-9 Credits.

(R-9) Offered autumn and spring. Level: Graduate

Media Arts (MART)

MART 101L - Intro to Media Arts. 3 Credits.

Offered autumn and spring. How do narrative and literary techniques manifest themselves in the media arts? Using the language of film as a starting point, students analyze storytelling through various media, including movies, television, the Internet, animation and video games.

Gen Ed Attributes: Lit & Artistic Studies (L)

MART 102 - Digital Technology in the Arts. 3 Credits.

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 - Intro to Photoshop. 3 Credits.

Offered every term. Online Course. This project-oriented design and compositing course introduces students to the fundamentals of Adobe Photoshop while focusing on artistic expression in a digital technology environment.

Gen Ed Attributes: Expressive Arts Course (A)

MART 112A - Introduction to Film Editing. 3 Credits.

offered autumn and spring. Study of the history, process and philosophy of narrative ?lm/video editing.

Gen Ed Attributes: Expressive Arts Course (A)

MART 120 - Creative Coding I. 3 Credits.

offered autumn and spring. This course focuses on the fundamentals of programming and its connection to the creative and expressive possibilities of media art. Visual and scripting languages provide the foundation by which stories and games are created.

MART 191 - Special Topics. 1-6 Credits.

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

MART 201H - Hist Digital Arts & Culture. 3 Credits.

Offered every term. This course places current digital technologies within a historical context in order to understand and articulate how the digital world in which we live, and the tools with which we create, are connected to people, cultures and times before the latest innovations were even conceived. This knowledge will prepare students to engage with creative professionals across areas of expertise and to have a broader sense of their lives as citizens in a globally and historically connected world.

Gen Ed Attributes: Historical Studies

MART 214 - Digital Publishing & Design. 3 Credits.

Offered autumn. Offered at Missoula College. Prereq., CAPP 120, CSCI 105, or consent of instructor. A comprehensive foundation of layout and design principles to integrate digital media essential for effective print-based and web-based business publications.

MART 220 - Creative Coding II. 3 Credits.

Offered intermittently. Prereq., MART 120. Building on the techniques, theory, and skills acquired in Creative Coding I, students create artworks and experiences focusing on physical computing. These include, but not limited to: Raspberry Pi, Arduino, Virtual Reality and Augmented Reality.

MART 232 - Interactive Web II. 3 Credits.

Offered autumn and spring. Offered at Missoula College. 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.

MART 235 - Fundamentals of Type. 3 Credits.

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 245 - Introduction to the Language and Practice of Sonic Art. 3 Credits.

Offered autumn. This course is intended as a foundation course to create shared terminology, skillsets, aesthetics, scientific understanding, and creative techniques of sonic art. Starting with the birth of electricity, Futurism, and Dada, students will examine the practices and innovations that led to the most current ideas about sound art, music, intermedia, and installation. Additionally, students will apply this knowledge to the creation of their own sonic art works.

MART 255 - Photoshop: Art and Design. 3 Credits.

Offered spring. This project-based course explores a variety of design principles and techniques through Adobe Photoshop.

MART 256 - Illustrator: Vector and Layout Design. 3 Credits.

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 291 - Special Topics. 1-6 Credits.

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

MART 292 - Independent Study. 1-6 Credits.

(R-6) Offered intermittently. Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student.

MART 300 - Visions of Film. 3 Credits.

Offered spring. Prereq., Media Arts majors only. Study of major ?lm theories that led to the constitution of visual ?lm language and their application in contemporary ?lm narrative and direction.

Gen Ed Attributes: Writing Course-Intermediate

MART 302 - Intro to Motion Design. 3 Credits.

Offered autumn and spring. Media Arts majors only. This project-oriented course will introduce students to the basic technical and aesthetic components of digital motion design and 2D animation using the industry standard software programs Photoshop and After Effects.

MART 304 - Modern Horror Film. 3 Credits.

Offered autumn and spring. This class explores the changing landscape of the horror ?lm since 1960, studying the genre and its sociological importance through the language of cinema.

MART 305 - 3D Animation I. 3 Credits.

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 323 - 3D Motion Design I. 3 Credits.

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 325 - Introduction to Animation. 3 Credits.

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. 3 Credits.

Offered spring. Media Arts majors only. 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 330 - Principles of Sound Design. 3 Credits.

Offered autumn. Media Arts majors only. Introduction to fundamental concepts, principles and practices of digital sound recording and editing in order to establish a common aesthetic and technical language necessary to develop quality audio design.

MART 332 - Introduction to Film Scoring. 3 Credits.

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. 3 Credits.

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.

MART 336 - Directing the Fic Film. 3 Credits.

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. 3 Credits.

Offered autumn and spring. Prereq., MART 120 and Media Arts majors only. Introduction to interactive theory and art. This course is designed to help students gain the skill sets necessary to successfully create work in the constantly evolving arts environment. Installation-based works. Uses code and material.

MART 341 - Intro to Web Design. 3 Credits.

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. 3 Credits.

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 345 - Sound for Film. 3 Credits.

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 355 - Experimental Documentary Media. 3 Credits.

In this course, students will explore the state of contemporary documentary media through investigating new approaches to integrating narrative content in documentary, interactive documentary, avant-garde documentaries, sensory filmmaking, and experiments in collaborating with documentary subjects. The focus of this course is to expand students' understanding of the possibilities of the documentary genre. Selected films, film history and theory will encourage students toward a more expansive definition of documentary practice, while considering how they might create new work in documentary arts.

MART 391 - Special Topics. 1-12 Credits.

(R-12) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

MART 392 - Independent Study. 1-6 Credits.

(R-12) Offered intermittently. Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student.

MART 395 - Practicum I. 3 Credits.

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.

MART 398 - Internship. 1-6 Credits.

MART 416 - Production Studio I. 3 Credits.

Offered autumn. Prereq., Media Arts major. Students create storyboards/previsuals, idea sketches and writing synopses, as well as identity and promotion of what will become ?nished works. Projects begun here will be continued in MART 457.

MART 420 - Sonic Programming. 3 Credits.

Offered autumn. Prereq., MART 120. This course merges skills and technique of creative coding with the creation of sonic art works. The majority of the class is focused on the creation of dynamic sound-based art works, and the application of concepts from interactive theory and interactive systems.

MART 422 - Digital Compositing II. 3 Credits.

Offered spring. Media Arts majors only. Combines the common aesthetic and technical language with solid motion design principles. Students immerse themselves in the making of a body of integrated-digital 2D and 3D work that explores the technical and aesthetic possibilities of multi-layered x y z plane actualizations.

MART 432 - Techniques of Film Scoring. 3 Credits.

Offered intermittently. 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 436 - Producing. 3 Credits.

Offered intermittently. Students take on the creative role of the producer in making narrative films. The class covers everything from script choice and analysis through hiring, casting, budgeting, and all of the steps from pre-production to post-production in the delivery of a completed project. Included are guest lectures from industry professionals in key areas of the filmmaking profession.

MART 440 - Tech Interactive Media Design. 3 Credits.

Offered spring. Media Arts majors only. Prerequisite MAR 340. Advanced interactive media design class that builds on the foundation of principles taught in MAR 340.

MART 441 - Web Technologies. 3 Credits.

Offered autumn and spring. This online advanced web technologies course explores client-side scripting using HTML, CSS, JavaScript, and JQuery. Through the creation of complex interactive functions and user experiences students gain an understanding of the overall environment of web design technologies and a more integrated set of web design skills.

MART 445 - Sound for Digital Media. 3 Credits.

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 450 - Topics in Film/Media Studies. 3 Credits.

Offered autumn and spring. Prereq., Media Arts majors only. Research and exploration of contemporary ?lm, video, digital art and design. Focus on areas of student research both in commercial and non-commercial venues and styles.

Gen Ed Attributes: Writing Course-Advanced

MART 455 - Visions of Documentary Film. 3 Credits.

Offered spring. Media Arts majors only. Class focuses on the study of different works of documentary filmmaking as well as the processes needed to succeed in the world on non-fiction storytelling. While studying films students will prepare and complete a short documentary film piece of their own.

MART 457 - Production Studio II. 3 Credits.

Offered Spring. Prereq., Media Arts Major. This course covers the principles and techniques of finishing projects. Students will focus on advanced rendering tools, prototype testing, installation and final performances, refined editing/titles/credits, enabling students to leave with a well polished finished project.

MART 491 - Special Topics. 1-12 Credits.

(R-12) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

MART 492 - Independent Study. 1-6 Credits.

(R-12) Offered intermittently. Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student.

MART 495 - Practicum II. 3 Credits.

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.

MART 499 - Senior Project. 3 Credits.

(R-9) 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. 4 Credits.

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 509 - Media Production II. 4 Credits.

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. 4 Credits.

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. 4 Credits.

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. 4 Credits.

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. 2 Credits.

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 525 - Compositing Applic. II. 4 Credits.

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. 3 Credits.

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 578 - Graduate Studio. 1-6 Credits.

(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 580 - Principals of Cinematography. 4 Credits.

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 587 - Screenwriting II. 4 Credits.

Offered spring. Prereq., MAR 586. Continued work in screenwriting at an advanced level. Level: Graduate

MART 591 - Special Topics. 1-6 Credits.

(R-12) 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 - Graduate Practicum. 1-6 Credits.

(R-12) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, and one-time offerings of current topics. Level: Graduate

MART 596 - Independent Study. 1-6 Credits.

(R-12) Offered autumn and spring. Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student. Level: Graduate

MART 597 - Research. 1-12 Credits.

(R-12) Offered intermittently. Directed individual research and study appropriate to the back ground and objectives of the student. Level: Graduate

MART 598 - Internship. 1-6 Credits.

(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.

MART 601 - Final Portfolio Research. 3 Credits.

Offered every semester. Investigation into subjects relevant to the development of the students 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. 4 Credits.

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. 1-12 Credits.

Offered autumn. Ongoing production and content work relating to thesis projects. Level: Graduate

MART 688 - Media Practicum. 1-4 Credits.

(R-12) Offered every term. Pursuit of Practical Experience in Media Arts projects both personal and Professional. Level: Graduate

MART 690 - Professional Practices. 3 Credits.

(R-6) Offered every term. Work outside of program in an area of professional interest. Level: Graduate

MART 695 - Special Topics. 1-8 Credits.

MART 698 - Internship. 1-6 Credits.

(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.

MART 699 - Final Portfolio II. 1-12 Credits.

Offered spring. Final work on thesis portfolio. Approval by the student?s thesis committee is required for graduation. Level: Graduate

Media Arts-Filmmaking (MAR)

MAR 210 - Creation of Media Story. 3 Credits.

Offered autumn. Media Arts majors only. Preparatory to writing in visual story forms (screenplay, animation, games) students immerse themselves in writing and drawing improvisations through journaling and short project creation.

MAR 251 - Dig Video Prod Tech. 3 Credits.

Offered autumn. Preqeq., major in Media Arts. A project-based class, students learn the use and application of filmmaking equipment, including cameras, lights and sound. Short film projects are produced to apply principles and work in various roles required for the completion of a fiction film.

MAR 252 - Screenwriting. 3 Credits.

Offered spring. Prereq., Media Arts Major. Intermediate level writing class devoted to short films, with an emphasison writing camera-ready scripts for production. Feature film structure and techniques are also introduced.

MAR 335 - Experimental Animation. 3 Credits.

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 442 - Experimental Film. 3 Credits.

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. 3 Credits.

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 465 - Special Projects. 3 Credits.

Offered autumn. Media Arts majors only. Focus on the production of short commercial works, including advertisements, industrial work, how to videos, as well as paper projects with potential clients. Students develop a DVD/Web portfolio for entry into the profession upon graduation. The class serves as a synthesis point for analysis and presentation of techniques and principles learned throughout the program.

MAR 470 - Adv. Acting for Film I. 3 Credits.

Offered spring. Prereq., MART 416. Projects begun in MART 416 are finished here. Students focus on advanced rendering tools, prototype testing, installation and final performances, refined editing/titles/credits, enabling students to leave with a well-polished finished project.

MAR 471 - Adv. Acting for Film II. 3 Credits.

Offered spring. A project-based course that combines actors and directors in the collaborative creation of a short fiction film.

Metals & Machining Technology (MCH) < University of Montana

Metals & Machining Technology (MCH)

MCH 101 - Introduction to Manufacturing Processes. 1 Credit.

Offered autumn. Offered at Missoula College. This course is designed to introduce the student with an overview of manufacturing to include engineering materials and product attributes, material removal processes, property enhancing and surface processing operations, special processes and assembly technologies, and manufacturing systems.

MCH 102 - Introduction to Manufacturing Materials. 2 Credits.

Offered spring. Offered at Missoula College. This is an introductory course in the study of materials used in the manufacturing industry. Topics include selection and identification of steels, selection and identification of nonferrous metals, mechanical behavior of various plastics, hardening, case hardening, tempering, annealing, normalizing, stress relieving, and the use of the Rockwell and Brinell hardness testers.

MCH 112 - Related Metals Processes I. 1 Credit.

Offered spring. Offered at Missoula College. 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.

MCH 114 - Related Metals Processes II. 3 Credits.

Offered autumn. Offered at Missoula College. 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.

MCH 115 - Related Metals Processes III. 3 Credits.

Offered spring. Offered at Missoula College. A basic metalworking course covering fasteners, layout, bench metal, heat treating, threads and threading, drills and drilling, basic machining, and tool sharpening.

MCH 120 - Blueprint Reading & Interpretation for Machining. 3 Credits.

Offered autumn. Offered at Missoula College. This course introduces the fundamental concepts necessary to interpret and make drawings with symbols, various schematics and diagrams, dimensioning techniques, section views, auxiliary views, threads and fasteners, and sketching typical to all shop drawings. Interpretation of specifications and determination of acceptable tolerance requirements to ensure quality control measures for design parts will also be stressed.

MCH 122 - Introduction to CAM. 3 Credits.

Offered spring. Offered at Missoula College. This course introduces Computer Aided Manufacturing (CAM) operational basics for both mill and lathe programming using current CAM software. The course includes terminology relevant to PC-based CAD/CAM work, hardware familiarity, system operation and management, folders, file type and structure, menu structure and use, and 3 axis (milling machines) and 2 axis (lathes) tool paths. Emphasis is placed on proper geometric creation, management, relevant utilities, and toolbar and menu functions.

MCH 125 - Introduction to CNC Lathes. 3 Credits.

Offered spring. Offered at Missoula College. Prereq., MCH 132. This course provides opportunities for students to develop skills in the safe setup, maintenance, and operation of CNC lathes and related periphery tools and skills. Topics covered include CNC lathe parts, controls, tool holding, tool insert geometry, chip formation, speeds and feeds, operation and process planning, threads, fits, dimensioning and tolerances, surface finish, and the following lathe processes: facing, turning, tapering, drilling, boring, reaming, chamfering, grooving, parting-off, internal and external threading, tapering, and knurling. Graded projects based on chuck, collet, and fixturing will be done. Related periphery tooling, use and care of precision measuring tools, in addition to related math used in the trade, will also be covered.

MCH 127 - Introduction to CNC Mills. 3 Credits.

Offered spring. Offered at Missoula College. Prereq., MCH 134. This course provides instruction in the setup and operation of CNC mills. Student projects include specialty tooling and multi-axis machining. Students will also gain experience in process control. Topics include specialty tooling, multi-axis machining, process control, and laboratory exercises in part production.

MCH 129 - Machine Quality Control and Precision Measurements. 3 Credits.

Offered autumn. Offered at Missoula College. Students will develop the knowledge to analyze and evaluate the processes and methodology required in an industrial production environment to determine whether quality control standards are being met. Topics include use of non-precision measuring tools, use of precision measuring tools, use of comparison gauges, and analysis of measurements in a CNC environment.

MCH 130 - Machine Shop. 3 Credits.

Offered spring. Offered at Missoula College. The course content covers a broad range of shop fundamentals in manual and CNC machining. This course includes an emphasis on shop and work area safety. Instruction covers standard shop work, such as measurement, layout, basic hand tools, drills, drill presses, and taps and dies. Use of pedestal grinder will be covered. Work assignments incorporate projects requiring use of the above

machines, tooling, and emphasizes safety.

MCH 132 - Introduction to Manual Engine Lathes. 4 Credits.

Offered autumn. Offered at Missoula College. Prereq./corereq., MCH 120 and MCH 129. This introduction to Manual Engine Lathes will cover the safety, maintenance and operation of manual engine lathes and related periphery tools and skills. Subjects covered include HSS tool bit grinding and tool bit geometry, chip formation, speeds and feeds, operation and process planning, threads, fits, dimensioning and tolerances, surface finish, and the following lathe processes: facing, turning, tapering, drilling, boring, reaming, chamfering, grooving, parting-off, internal and external threading, tapering, knurling, filing and polishing. Graded projects using between centers and chuck work turning will be done. Related periphery tooling, use and care of precision measuring tools, in addition to related math used in the trade, will also be covered.

MCH 134 - Introduction to Manual Mills. 4 Credits.

Offered autumn. Offered at Missoula College. Prereq./co-req., MCH 120 and MCH 129. The student will perform advanced hands-on machine shop operations: set up and operation of manual milling machines, drill presses, band saws, grinders, and other equipment commonly found in manufacturing facilities. The student will use precision measuring tools and methods, utilize blueprints, and perform project process planning. Various types of steel and aluminum are use.

MCH 191 - Special Topics. 1-6 Credits.

(R-6). Offered intermittently. Offered at Missoula College.

MCH 196 - Independent Study Variable. 1-6 Credits.

(R-6) Offered intermittently. Offered at Missoula College. Course material appropriate to the needs and objectives of the individual student.

MCH 198 - Internship. 1-6 Credits.

Offered at Missoula College. 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 292 - Independent Study. 1-6 Credits.

(R-6) Offered intermittently. Offered at Missoula College.

Military Science Leadership (MSL) < University of Montana

Military Science Leadership (MSL)

MSL 101 - Leadership and Personal Dev. 3 Credits.

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.

MSL 102 - Intro to Tactical Leadership. 3 Credits.

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.

MSL 106 - Army Physical Fitness. 1 Credit.

(R?10) 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.

MSL 195 - Special Topics. 1-6 Credits.

(R?6) Offered autumn and spring. Experimental offerings of visiting professors, experimental offerings of new courses, or one?time offerings of current topics.

MSL 201 - Innovative Team Leadership. 3 Credits.

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.

MSL 202 - Found of Tactical Leadership. 3 Credits.

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.

MSL 203 - Ranger Challenge. 2 Credits.

(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.

MSL 291 - Special Topics. 1-6 Credits.

(R?6) Experimental offerings of visiting professors, experimental offerings of new courses, or one?time offerings of current topics.

MSL 295 - Special Topics. 1-6 Credits.

(R?6) Offered spring. Experimental offerings of visiting professors, experimental offerings of new courses, or one?time offerings of current topics.

MSL 296 - Leadership Practicum. 1-4 Credits.

(R?4) Offered autumn and spring. Prereq., consent of instr. Intensive supervised study in applied leadership and management development in an organizational setting.

MSL 301 - Adaptive Team Leadership. 3 Credits.

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.

MSL 302 - Applied Team Leadership. 3 Credits.

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.

MSL 303 - Leadership Laboratory. 1 Credit.

(R?10) Offered autumn and spring. Prereq., consent of instr. Coreq., MSL 301, 302, 401, or 402. Practical application of skills learned in the classroom.

MSL 305 - Leadership Development and Assessment Course. 3 Credits.

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. 1-9 Credits.

(R?9) Offered autumn and spring. Experimental offerings of visiting professors, experimental offerings of new courses, or one?time offerings of current topics.

MSL 401 - Adaptive Leadership. 3 Credits.

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.

MSL 402 - Leadership in a Complex World. 3 Credits.

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.

MSL 492 - Coop Education/Internship. 1-4 Credits.

(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.

Modern & Classical Literature - General (MCLG)

MCLG 110 - Introduction to European Studies. 3 Credits.

Offered autumn. This course offers an introduction to key concepts and themes of European Studies. It examines the phenomenon of Europe as a geographic region as well as an historical cultural construct.

MCLG 300 - Language in the Real World: Introduction to Applied Linguistics. 3 Credits.

Offered in the Autumn semester, every even numbered year. Many problems we encounter day-to-day have to do in one way or another with language. From addressing friends to writing academic texts, and from learning to write to using voice recognition technology to search the Internet, a lot of what we do in our private and professional lives has to do with language. Resolving language-related problems/issues in the real-world is a complex and dynamic task that requires not only knowledge about what language is and how it works, but also the use of interdisciplinary resources. Applied linguistics has developed into a problem driven and real-world based field that addresses language-based problems in real-world contexts. In this course you will explore language problems: (a) In human development and across the lifespan, (b) in education, (c) in society, and (d) in professional and institutional settings.

MCLG 315 - Major Hispanic Authors. 3 Credits.

Offered autumn. Prereq., WRIT 101 or equivalent, and one intermediate writing course. The intensive study of the life times, and works of a major Hispanic author.

Gen Ed Attributes: Writing Course-Advanced

MCLG 391 - Special Topics. 1-6 Credits.

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

MCLG 410 - Methods Teaching Foreign Language. 3 Credits.

Offered spring. Fundamental concepts, objectives and techniques in the teaching of foreign languages.

Music (MUSI) < University of Montana

Music (MUSI)

MUSI 101L - Enjoyment of Music. 3 Credits.

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.

Gen Ed Attributes: Lit & Artistic Studies (L)

MUSI 102A - Performance Study. 1-2 Credits.

(R-6) Offered autumn and spring. Prereq., consent of instr. Individual instruction in voice, piano, organ, harpsichord, carillon, string, wind and percussion instruments. All private instruction requires concurrent ensemble participation. A maximum of 6 credits is allowed in music performance.

Gen Ed Attributes: Expressive Arts Course (A)

MUSI 104 - Music Fundamentals. 2 Credits.

Offered autumn. Basic principles of notation, including clefs, scales, intervals, chords and rhythm.

MUSI 105 - Music Theory I. 2 Credits.

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. 2 Credits.

Offered spring. Prereq., MUSI 105. Coreq., MUSI 141. Continuation of MUSI 105.

MUSI 108A - Orchestra: UMSO. 1 Credit.

(R-8) Offered autumn and spring. 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.

Gen Ed Attributes: Expressive Arts Course (A)

MUSI 110A - Opera Theatre I. 1 Credit.

(R-8) Offered autumn and spring. Prereq., consent of instr. Study and performance of the standard opera repertoire.

Gen Ed Attributes: Expressive Arts Course (A)

MUSI 111A - Singing for Non-Majors. 2 Credits.

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.

Gen Ed Attributes: Expressive Arts Course (A)

MUSI 112A - Choir. 1 Credit.

(R-8) 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.

Gen Ed Attributes: Expressive Arts Course (A)

MUSI 114A - Band: UM Concert Band. 1 Credit.

(R-8) Offered autumn and spring. Major musical organizations open to all University students. Audition required for Symphonic Wind Ensemble.

Gen Ed Attributes: Expressive Arts Course (A)

MUSI 122A - Percussion Ensemble: UM. 1 Credit.

(R-8) Offered autumn and spring. Prereq., consent of instr. String, woodwind, brass, percussion, piano and vocal ensembles as appropriate to meet student needs.

Gen Ed Attributes: Expressive Arts Course (A)

MUSI 123A - World Percussion Ensemble. 1 Credit.

(R-8) Offered autumn and spring. Prereq., consent of instr. String, woodwind, brass, percussion, piano and vocal ensembles as appropriate to meet student needs.

Gen Ed Attributes: Expressive Arts Course (A)

MUSI 130L - History of Jazz. 3 Credits.

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.

Gen Ed Attributes: Lit & Artistic Studies (L)

MUSI 131A - Jazz Ensemble I: UM Jazz Bands. 1 Credit.

(R-8) Offered autumn and spring. Prereq., consent of instr. Study and performance of the jazz repertoire.

Gen Ed Attributes: Expressive Arts Course (A)

MUSI 132L - History of Rock & Roll. 3 Credits.

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.

Gen Ed Attributes: Lit & Artistic Studies (L)

MUSI 133L - Cntry Msc:Cowbys,Opry,Nshville. 3 Credits.

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.

Gen Ed Attributes: Lit & Artistic Studies (L)

MUSI 135A - Keyboard Skills I. 1 Credit.

Offered autumn. Prereq., music majors or consent of instructor. Music reading, techniques, and harmonization skills acquired through study of solo and ensemble repertoire in a contemporary electronic piano laboratory.

Gen Ed Attributes: Expressive Arts Course (A)

MUSI 136A - Keyboard Skills II. 1 Credit.

Offered spring. Prereq., MUSI 135A. Continuation of MUSI 135A.

Gen Ed Attributes: Expressive Arts Course (A)

MUSI 140 - Aural Perception I. 2 Credits.

Offered autumn. Coreq., MUSI 105. A laboratory course in singing and dictation to supplement Theory I.

MUSI 141 - Aural Perception II. 2 Credits.

Offered spring. Prereq., MUSI 140; coreq., MUSI 106. Continuation of MUSI 140.

MUSI 155A - Marching: Grizzly Marchng Band. 1 Credit.

(R-8) Offered autumn. A musical organization of brass, woodwinds, percussion, and auxiliary units open to all University students with no audition required.

Gen Ed Attributes: Expressive Arts Course (A)

MUSI 160A - Beginning Guitar. 2 Credits.

Offered autumn. A beginning course in the fundamentals of playing folk guitar. Includes introduction to the rudiments of music.

Gen Ed Attributes: Expressive Arts Course (A)

MUSI 162A - Chamber Ensembles I. 1 Credit.

(R-20) Offered autumn and spring. Prereq., consent of instr. String, woodwind, brass, percussion, piano and vocal ensembles as appropriate to meet student needs.

Gen Ed Attributes: Expressive Arts Course (A)

MUSI 180 - Composition I. 1-2 Credits.

(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. 1-9 Credits.

(R-9) Offered autumn and spring. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

MUSI 192 - Independent Study. 1-3 Credits.

(R-9) Offered autumn and spring. Course material appropriate to the needs and objectives of the individual student.

MUSI 195 - Applied Study I. 1-4 Credits.

(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.

MUSI 202L - Intro to Music Literature. 3 Credits.

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 202L.

Gen Ed Attributes: Lit & Artistic Studies (L)

MUSI 205 - Music Theory III. 2 Credits.

Offered autumn. Prereq., MUSI 106 and 141; coreq., MUSI 240. Continuation of MUSI 106.

MUSI 206 - Music Theory IV. 2 Credits.

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). 3 Credits.

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.

Gen Ed Attributes: Historical Studies, Cultural Intl Diversity (X)

MUSI 218 - Int Piano Cls (Honors). 1 Credit.

Offered intermittently. Prereq., placement examination. Accelerated offering of the material covered in MUSI 235 and 236.

MUSI 225 - Jazz Theory & Improvisation I. 2 Credits.

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. 2 Credits.

Offered spring. Prereq., MUSI 225. Continuation of MUSI 225.

MUSI 235 - Keyboard Skills III. 1 Credit.

Offered autumn. Prereq., MUSI 136A or equiv and music major or consent of instructor. Continuation of MUSI 136A.

MUSI 236 - Keyboard Skills IV. 1 Credit.

Offered spring. Prereq., MUSI 235. Continuation of MUSI 235, culminates in piano functional examination.

MUSI 240 - Aural Perception III. 2 Credits.

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. 2 Credits.

Offered spring. Prereq., MUSI 240; coreq., MUSI 206. See MUSI 240.

MUSI 267A - Composer's Workshop. 1 Credit.

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.

Gen Ed Attributes: Expressive Arts Course (A)

MUSI 280 - Composition II. 1-2 Credits.

(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. 2 Credits.

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). 2 Credits.

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. 1-9 Credits.

(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. 1-4 Credits.

(R-12) Offered autumn and spring. Prereq., audition and consent of instr. Continuation of 151. All private instruction requires concurrent ensemble participation.

MUSI 296 - Piano Prof Assessment. 0 Credits.

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.

MUSI 301H - Music History I. 3 Credits.

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.

Gen Ed Attributes: Historical Studies, Democracy and Citizenship (Y)

MUSI 302H - Music History II. 3.000 Credits.

Offered spring. Prereq., MUSI 202L. The history of music in Western civilization from 1750 to modern times. See MUSI 301H.

Gen Ed Attributes: Historical Studies, Writing Course-Intermediate, Democracy and Citizenship (Y)

MUSI 304A - Sound in the Natural World. 3 Credits.

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.

Gen Ed Attributes: Expressive Arts Course (A)

MUSI 308 - Orchestras II: UM. 1 Credit.

Offered autumn and spring. Prereq., upper-division standing in instrument of participation. See MUSI 108A for description.

MUSI 310 - Opera Theatre II. 1 Credit.

(R-8) Offered autumn and spring. Prereq., consent of instr. See MUSI 131A for description.

MUSI 312 - Choir III. 1-8 Credits.

Offered autumn and spring. Prereq., upper-division standing in voice. See MUSI 112A for description.

MUSI 314 - Band III: UM Concert Band. 1 Credit.

Offered autumn and spring. Prereq., upper-division standing in instrument of participation. See MUSI 114A for description.

MUSI 322 - UM Percussion Ensemble. 1 Credit.

Offered autumn and spring. Prereq., consent of instructor. See MUSI 122A.

MUSI 323 - World Percussion Ensemble. 1 Credit.

Offered autumn and spring. Prereq., consent of instructor. See MUSI 122A.

MUSI 331 - Jzz Ens II: UM. 1 Credit.

(R-8) Offered autumn and spring. Prereq., consent of instr. See MUSI 131A for description.

MUSI 332 - Advanced Functional Piano. 1 Credit.

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. 1-2 Credits.

(R-4) Offered intermittently. Prereq. or coreq., MUSI 435, 436. Student teaching of young pianists.

MUSI 335 - Instrumental Conducting. 2 Credits.

(R-4) Offered spring. Prereq., upper-division standing in music. Conducting methods and practice. Teaching methods and materials.

MUSI 336 - Choral Conducting. 2 Credits.

(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. 2 Credits.

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. 2 Credits.

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. 1 Credit.

(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. 2 Credits.

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. 2 Credits.

Offered spring. Prereq., upper-division standing in music and MUSI 356. Continuation of MUSI 356.

MUSI 362 - Chmbr Ens III: UM. 1 Credit.

(R-8) Offered autumn and spring. Prereq., consent of instructor. See MUSI 122A.

MUSI 380 - Composition III. 1-3 Credits.

(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. 0 Credits.

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. 1-9 Credits.

(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. 1-3 Credits.

(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. 1-4 Credits.

(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.

MUSI 399 - Junior Recital. 1-2 Credits.

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. 3 Credits.

Offered intermittently. Prereq., upper-division standing in music. Writing and analysis of contrapuntal styles through the 18th century.

MUSI 409 - String Pedagogy & Literature. 1-2 Credits.

(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. 2 Credits.

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. 2 Credits.

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. 2 Credits.

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. 3 Credits.

Offered intermittently. Prereq., WRIT 101 or equivalent, one intermediate writing course, MUSI 302H and upper-division standing in music. Detailed analysis and comparison of selected instrumental, vocal and keyboard compositions of the 20th Century.

Gen Ed Attributes: Writing Course-Advanced

MUSI 416 - Topics in Music History. 3 Credits.

(R-3) Offered intermittently. Prereq., WRIT 101 or equivalent, one intermediate writing course, 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.

Gen Ed Attributes: Writing Course-Advanced

MUSI 417 - Cultural Studies in Music. 3 Credits.

(R-3) Offered intermittently. Prereq., WRIT 101 or equivalent, one intermediate writing course, 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.

Gen Ed Attributes: Writing Course-Advanced

MUSI 420 - Jazz Pedagogy. 3 Credits.

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. 3 Credits.

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. 3 Credits.

Offered spring odd-numbered years. Continuation of MUSI 435.

MUSI 435 - Piano Methods & Materials I. 3 Credits.

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. 3 Credits.

Offered spring even-numbered years. Prereq., MUSI 435. Continuation of MUSI 435.

MUSI 440 - Orchestration. 2 Credits.

Offered autumn. Prereq., upper-division standing in music. Orchestrating and transcribing for orchestra and band instruments.

MUSI 442 - Vocal Studio Pedagogy and Lit. 2 Credits.

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. 3 Credits.

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, resonation, 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. 1 Credit.

Offered autumn and spring. Prereq., consent of instructor. See MUSI 122A.

MUSI 470 - Jazz Arranging & Composition. 3 Credits.

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. 1-3 Credits.

(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. 1-9 Credits.

(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. 1-3 Credits.

(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. 1-4 Credits.

(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.

MUSI 499 - Senior Recital/Capstone Pjt. 1-4 Credits.

(R-4) Offered autumn and spring.

MUSI 500 - Secondary Perform Area. 1-2 Credits.

(R-6) Offered every term. Prereq., audition and consent of instr. Continuation of MUSI 102A. Level: Graduate

MUSI 511 - Advanced Conducting. 2 Credits.

(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. 1-2 Credits.

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 526 - Sem Instrumental Lit. 2 Credits.

(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. 1-4 Credits.

(R-12) Offered every term. Prereq., audition and consent of instr. Continuation of MUSI 495. Level: Graduate

MUSI 554 - Analytical Techniques I. 3 Credits.

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. 3 Credits.

Offered spring even-numbered years. Prereq., MUSI 554. Continuation of MUSI 554. Level: Graduate

MUSI 559 - Composition. 1-6 Credits.

(R-6) Offered intermittently. Prereq., consent of instr. Continuation of MUSI 480. Level: Graduate

MUSI 593 - Professional Projects. 1-4 Credits.

(R-4) Offered intermittently. Prereq., graduate standing in music. Level: Graduate

MUSI 595 - Special Topics. 1-8 Credits.

(R-8) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. Level: Graduate

MUSI 596 - Independent Study. 1-6 Credits.

(R-6) Offered intermittently. Prereq., consent of instr. Students must have projects approved by a music faculty member before enrolling. Level: Graduate

MUSI 598 - Internship. 1-6 Credits.

(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. 1-10 Credits.

(R-10) Offered intermittently. Prereq., graduate standing in music. Level: Graduate

MUSI 699 - Dissertation. 1-12 Credits.

Offered intermittently. Prereq., graduate standing in music. Level: Graduate

Music-Education (MUSE) < University of Montana

Music-Education (MUSE)

MUSE 120 - Techs: String Inst in Class I. 1 Credit.

(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. 1 Credit.

(R-2) Offered spring. Prereq., MUSE 120. Continuation of MUSE 120.

MUSE 123 - Techniques: Voice. 1 Credit.

(R-2) 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.

MUSE 126 - Techs: Percussn Instruments I. 1 Credit.

(R-2) Offered autumn. Basic instruction in percussion instruments, with emphasis on teaching procedures.

MUSE 127 - Techs: Percussn Instruments II. 1 Credit.

(R-2) Offered spring. Prereq., MUSE 126. Continuation of MUSE 126. Basic instruction in percussion instruments, with emphasis on teaching procedures.

MUSE 272 - Techniqus: Flute & Single Reed. 1 Credit.

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. 1 Credit.

(R-2) Offered autumn. Basic instruction in oboe and bassoon, with emphasis on teaching procedures.

MUSE 274 - Techniques: Upper Brass. 1 Credit.

(R-2) Offered autumn. Basic instruction in trumpet and horn, with emphasis on teaching procedures.

MUSE 275 - Techniques: Lower Brass. 1 Credit.

Offered spring. Basic instruction in trombone, baritone, and tuba, with emphasis on teaching procedures.

MUSE 333 - Gen Music Methods & Materls I. 2 Credits.

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. 2 Credits.

Offered spring. Prereq., upper-division standing in music and EDU 202. Continuation of MUSE 333.

MUSE 397 - Methods: K-8 Music. 2 Credits.

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. 2 Credits.

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 491 - Special Topics. 1-3 Credits.

MUSE 492 - Independent Study. 1-3 Credits.

MUSE 497 - Methods. 2 Credits.

(R-4) 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. 2 Credits.

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. 2 Credits.

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. 2 Credits.

(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. 1-2 Credits.

(R-4) Same as CP 582. Offered summers. Topics vary. Level: Graduate

MUSE 583 - Arts Educ Seminar II. 1-2 Credits.

(R-4) Prereq., MUSE 582. Same as CP 583. Offered summers. Topics vary. Level: Graduate

MUSE 584 - Arts Educ Seminar III. 1-2 Credits.

(R-18) Prereq., MUSE 583. Same as CP 584. Continuation MUSE 583. Level: Graduate

MUSE 585 - Arts Educ Seminar IV. 1-2 Credits.

(R-4) Prereq., MUSE 584. Same as CP 585. Continuation of MUSE 584. Level: Graduate

MUSE 588 - Arts Ed Apprenticeship. 1-3 Credits.

(R-24) Offered summer. Same as CP 588. Exploration of art forms to develop new artistic and communicative perceptions and awareness. Level: Graduate

Music-Technology (MUST) < University of Montana

Music-Technology (MUST)

MUST 110 - Digital Audio & Multitracking. 2 Credits.

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 192 - Independent Study. 1-3 Credits.

MUST 210 - Sequencng, Synthesis, Sampling. 2 Credits.

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 Electroacoustc Lptp Ens I. 1 Credit.

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.

Gen Ed Attributes: Expressive Arts Course (A)

MUST 310 - Interactivity Digitl Sgnl Proc. 2 Credits.

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. 2 Credits.

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 Electroacoustc Lptp Ens II. 1 Credit.

Offered autumn and spring. Prereq., consent of instructor. See MUSI 122A.

MUST 491 - Special Topics. 1-6 Credits.

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

MUST 492 - Independent Study. 1-3 Credits.

(R-9) Offered autumn and spring. Prereq., consent of instr.

MUST 595 - Special Topics. 1-8 Credits.

(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. 1-6 Credits.

(R-6) Offered intermittently. Prereq., consent of instr. Students must have projects approved by a music faculty member before enrolling. Level: Graduate

Native American Studies (NASX) < University of Montana

Native American Studies (NASX)

NASX 105H - Intro Native Amer Studies. 3 Credits.

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.

Gen Ed Attributes: Historical Studies, Cultural Intl Diversity (X)

NASX 141 - Elementary Blackfoot I. 5 Credits.

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.

NASX 142 - Elementary Blackfoot II. 4 Credits.

Offered intermittently spring. Continuation of 141.

Gen Ed Attributes: Foreign Language Requirement

NASX 180 - Event Planning. 3 Credits.

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. 1-9 Credits.

(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. 1-6 Credits.

(R-6) Prereq., consent of instr. Selected topics on American Indians under the direct supervision of a faculty member.

NASX 198 - Internship. 1-6 Credits.

(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.

NASX 201X - Indian Cultr Exprssd Thru Lang. 3 Credits.

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.

Gen Ed Attributes: Cultural Intl Diversity (X)

NASX 210X - Native Amer Sports & Games. 3 Credits.

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.

Gen Ed Attributes: Cultural Intl Diversity (X)

NASX 231X - Indig World View Perspectives. 3 Credits.

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

Gen Ed Attributes: Cultural Intl Diversity (X)

NASX 235X - Oral/Written Trads Native Amer. 3 Credits.

Offered Autumn and Spring. Prereq., WRIT 101 (or higher) or equivalent. Analysis of the oral traditions of Native Americans including an introduction to the literary works of early leading American Indian writers.

Gen Ed Attributes: Lit & Artistic Studies (L), Writing Course-Intermediate, Cultural Intl Diversity (X)

NASX 239X - Nat North Amer History & Art. 3 Credits.

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.

Gen Ed Attributes: Lit & Artistic Studies (L), Cultural Intl Diversity (X)

NASX 260X - Indig Community Developmnt. 3 Credits.

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.

Gen Ed Attributes: Cultural Intl Diversity (X)

NASX 280 - NA Studies Rsrch Theors/Mthds. 3 Credits.

Offered Autumn. Prereq., WRIT 101 (or higher) or equivalent, 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.

Gen Ed Attributes: Writing Course-Intermediate

NASX 291 - Special Topics. 1-6 Credits.

(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. 1-6 Credits.

(R 6) Experimental offerings of visiting professors, experimental offerings of new courses or one time offerings of current topics.

NASX 303E - Ecological Perspectives in Native American Traditions. 3 Credits.

An examination of Native American environmental ethics and tribal and historical and contemporary use of physical environmental resources.

Gen Ed Attributes: Ethical & Human Values Course, Cultural Intl Diversity (X)

NASX 304E - Native American Beliefs/Philos. 3 Credits.

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.

Gen Ed Attributes: Ethical & Human Values Course, Cultural Intl Diversity (X)

NASX 306X - Contemp Global Iss Indg People. 3 Credits.

Offered Autumn. An examination of the major issues that affect the contemporary experiences of Indigenous Peoples of the Americas, and other global communities.

Gen Ed Attributes: Cultural Intl Diversity (X)

NASX 340 - Native American Lit. 3 Credits.

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.

NASX 351 - Traditional Eco Knowledge. 3 Credits.

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. 3 Credits.

Offered autumn. This course is one unit of the four unit (12 credit) fall semester program: Montana Afoot & Afloat: Human/Land Relations. 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. 3 Credits.

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.

Gen Ed Attributes: Cultural Intl Diversity (X)

NASX 360 - Native Amer and Cinema. 3 Credits.

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. 1-6 Credits.

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

NASX 392 - Independent Study. 1-12 Credits.

NASX 394 - Workshop/Seminar. 1-6 Credits.

(R-6) Offered intermittently. Variable topics addressing Indian law, policy and culture by visiting scholars.

NASX 398 - Internship. 1-6 Credits.

(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.

NASX 403 - Contmp Tribal Resource Issues. 3 Credits.

Offered intermittently. Acquaints students with contemporary tribal resource management and environmental policies.

NASX 405H - Gndr Iss in Native Amer Stdies. 3 Credits.

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.

Gen Ed Attributes: Historical Studies

NASX 430 - American Indian Education. 3 Credits.

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. 3 Credits.

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 - History of American Indian Affairs in the 19th Century. 3 Credits.

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. 3 Credits.

A study of tribal encounters and adjustments to the American nation from 1890.

NASX 475 - Tribal Sovereignty. 3 Credits.

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 488 - Stds in Native Amer Autobio. 3 Credits.

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. 1-6 Credits.

(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. 1-6 Credits.

(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. 3 Credits.

(R-6) Offered Spring. Prereq., WRIT 101 or equivalent, one intermediate writing course, 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.

Gen Ed Attributes: Writing Course-Advanced

NASX 499 - Senior Capstone/Thesis. 3-9 Credits.

(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. 1-3 Credits.

(R-6) Offered intermittently. Prereq., consent of instr. A review and discussion of current research. Topics vary. Level: Graduate

NASX 595 - Special Topics. 1-9 Credits.

(R-9) Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. Level: Graduate

NASX 596 - Independent Study. 1-6 Credits.

(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

NASX 598 - Internship. 1-6 Credits.

(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

Natural Resource Science and Management (NRSM)

NRSM 121S - Nature of Montana. 3.000 Credits.

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.

Gen Ed Attributes: Social Sciences Course (S)

NRSM 170 - International Envir. Change. 3 Credits.

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 191 - Special Topics. 1-6 Credits.

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

NRSM 192 - Independent Study. 1-3 Credits.

NRSM 200 - Nat.Resource Professional Wrtg. 3 Credits.

Offered autumn and spring. Prereq., WRIT 101 (or higher) or equivalent. 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.

Gen Ed Attributes: Writing Course-Intermediate

NRSM 210N - Soils, Water and Climate. 3.000 Credits.

Offered spring. Prereq., M 115 or M 121 or M 122 or M 151 or M 162 or M 171 or M 172. The factors affecting earths 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 earths 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. Gen Ed Attributes: Natural Science Lab Course (N)

Gen Ed Attributes: Natural Science Course (N)

NRSM 215 - Field Studies in Conservation. 1 Credit.

(R-3) Offered intermittently. 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 Restoration. 3 Credits.

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. 3 Credits.

Offered autumn. Prereq., open to students enrolled in the Wilderness & Civilization program for the Wilderness Studies minor. 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.

Gen Ed Attributes: Natural Science Course (N)

NRSM 273 - Wilderness/Civ Field Stds. 1-3 Credits.

(R-6) Offered autumn and spring. Prereq., open to students enrolled in the Wilderness & Civilization program for the Wilderness Studies minor. 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.

NRSM 281 - Science of Climate Change. 3 Credits.

This course provides an introduction to Earths 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. 1-12 Credits.

(R-12) Offered intermittently. Experimental offerings of visiting professors; new courses or one time offerings of current topics.

NRSM 298 - Internship. 1-6 Credits.

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.

NRSM 311 - Field Stds ecol/Human Commun. 2-3 Credits.

(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. 2-3 Credits.

Offered Summer. Via an extended bicycle tour of Montana, students examine a variety of energy developments and their environmental, social, and economic implications.

NRSM 344 - Ecosystem Science and Restoration Capstone. 5 Credits.

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, NRSM 462, or WILD 485. This five-credit, service-learning course is the planning course for the capstone experience for students in the Ecosystem Science and Restoration major (although it is also open to students pursuing other majors). It is designed to get students active in research in ecosystem science and restoration ecology or in the application of ecological principles to restoration practice. 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. 3 Credits.

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 346 - Forest and Communities. 3 Credits.

Coreq., ENST 291, 391, 392, NRSM 345. Offered each autumn by Northwest Connections. Via backcountry travel and hands on field application in rural Montana, students will be immersed in the ecology of forested ecosystems in Northwest Montana, including plant succession, fire ecology, soil science and wildlife ecology.

NRSM 349E - Climate Change Ethics/Policy. 3 Credits.

Offered autumn. 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.

Gen Ed Attributes: Ethical & Human Values Course

NRSM 352 - Mountain Environment and Development. 3 Credits.

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). 3.000 Credits.

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 Conservation Policy/Governance. 3 Credits.

Offered autumn. Prereq., open to students enrolled in the Wilderness & Civilization program for the Wilderness Studies minor. 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.

Gen Ed Attributes: Social Sciences Course (S)

NRSM 371 - Wilderness Issues Lect Series. 1 Credit.

(R-3) Offered spring. Explores current issues in wilderness preservation, management and research.

NRSM 373 - Wilderness and Civilization. 3 Credits.

(R-6) Prereq., open to students enrolled in the Wilderness & Civilization program for the Wilderness Studies minor. 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.

NRSM 374 - Yellowstone Studies. 1 Credit.

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. 3 Credits.

Offered spring. Political and social processes affecting natural resource decisions. Examination of cases of multi-party collaboration in forestry, range, and watershed management issues.

NRSM 385 - Watershed Hydrology. 3 Credits.

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. 1 Credit.

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 389E - Ethics Forestry & Conservation. 3.000 Credits.

Offered autumn. Prereq., junior or senior standing. Theoretical and practical ethical issues affecting the management of natural resources in national forests and on other public lands.

Gen Ed Attributes: Ethical & Human Values Course

NRSM 391 - Special Topics. 12.000 Credits.

(R-12) Offered intermittently. Experimental offerings of visiting professors; new courses or one time offerings of current topics.

NRSM 392 - Independent Study. 1-3 Credits.

NRSM 395 - Community-Based Approaches to Wildlife Conservation. 1-6 Credits.

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. 1-6 Credits.

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.

NRSM 404 - Wilderness in American Context. 4 Credits.

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 405 - Mgt of Wilderness Resource. 4 Credits.

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. 3 Credits.

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 408 - Global Cycles and Climate. 3 Credits.

Offered spring even-numbered years. An analysis of the earths 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. 3 Credits.

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. 3 Credits.

Interactions between the biosphere and atmosphere to advanced undergraduate students and graduate students. This course will explore the interactions between Earths 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 Earths climate system. Basic physics and math is not required but it is recommended.

NRSM 422 - Nat Res Policy/Administration. 3 Credits.

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. 3 Credits.

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.

NRSM 426 - Climate and Society. 3 Credits.

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.

NRSM 427 - Advanced Water Policy. 3 Credits.

Offered spring. Prereq., junior or senior status. This course explores the laws, policies, and judicial decisions that have shaped and continue to influence patterns of water allocation and access in the United States. The course offers a general introduction to U.S. water law, specifically highlighting regional and interstate differences in both surface and groundwater appropriation schemes. Important intersections between water policy and other major bodies of U.S. law and policy are investigated, including the U.S.-tribal trust responsibility, the Clean Water Act the Endangered Species Act, and federal hydropower relicensing processes. In addition, special attention is paid to unique aspects of Montana water law and policy as well as current issues of local and regional importance. Level: Undergraduate and Graduate

NRSM 455 - Riparian Ecology & Management. 3 Credits.

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. 3 Credits.

Offered spring. NRSM 210N; and BIOO 105N or BIOB 170N or BIOE 172N or BIOB 160N or FORS 240; and FORS 201 or STAT 216 or SOCI 202 or WILD 240 or PSYX 222. 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. 3 Credits.

Offered spring. Prereq., WRIT 101 or equivalent, one intermediate writing course, 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.

Gen Ed Attributes: Writing Course-Advanced

NRSM 475 - Environment & Development. 3 Credits.

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.

NRSM 491 - Special Topics. 1-12 Credits.

(R-9) Offered intermittently. Experimental offerings of visiting professors; new courses or one time offerings of current topics.

NRSM 492 - Independent Study. 1-3 Credits.

NRSM 494 - Ecosystem Science and Restoration Seminar. 1 Credit.

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 - Ecosystem Science and Restoration Practicum. 1-6 Credits.

(R-6) Offered every semester. Prereq., senior standing in Ecosystem Science and Restoration 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 research, monitoring, or project implementation. Students will implement a project under the supervision of faculty and mentors from local management agencies, organizations or other sponsors.

NRSM 498 - Internship. 1-6 Credits.

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.

NRSM 499 - Senior Thesis. 1-3 Credits.

(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 500 - Conserv Social Sci Methods. 3 Credits.

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

NRSM 513 - Nat Res Conflict Resolution. 3 Credits.

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 - Collaborative Skills for Natural Resource Leaders. 3 Credits.

Same as COMX 515, ENST 515 and LAW 519. 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 524 - Community Forestry & Conservtn. 3 Credits.

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

NRSM 526 - Climate and Society. 3 Credits.

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

NRSM 532 - Forest Ecosystem Analysis. 3 Credits.

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 540 - The Food-Energy-Water Nexus. 3 Credits.

Offered autumn. Same as GEO 540. Interdisciplinary course examining interactions between food, energy, and water systems and core concepts and tools at the food-energy-water nexus. Perspectives and connections across scales, sectors, and disciplines (including social and biophysical sciences and engineering) are emphasized. Level: Graduate

NRSM 541 - Food-Energ-Water Nexus Field Lab. 2 Credits.

(R-4) Offered spring. Same as GEO 541. Field-based course connecting theory and practice by examining food-energy-water case studies, conducting interdisciplinary synthesis, and communicating with diverse stakeholders. Combines intermittent in-class meetings and a week-long field trip to regional sites to examine food-energy-water issues on-the-ground and to meet with and learn from producers, managers, policy-makers, and tribal

members.

NRSM 542 - Food-Energ-Water Nexus Seminar. 1 Credit.

(R-4) Offered autumn and spring. Same as GEO 542. Autumn seminars will focus on building interdisciplinary knowledge of the food-energy-water nexus through presentations from guest speakers, readings, and domestic and international case studies. Spring seminars will focus on building skills for multiple career paths through presentations and guest lectures.

NRSM 560 - Am Wilderness Phil & Policy. 4 Credits.

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. 4 Credits.

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. 4 Credits.

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. 3 Credits.

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. 3 Credits.

Offered spring. Prereq., graduate standing. Critical review of selected international natural resource development, conservation and management approaches and experiences. Level: Graduate

NRSM 574 - Perspectives in Human Dimensions. 3 Credits.

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

NRSM 575 - Environment & Development. 3 Credits.

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. 3 Credits.

(R-4) Offered every semester. Same as ENST 579 and LAW 679. Prereq., ENST 513, LAW 613, or NRSM 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 584 - Sustainable Protected Area Management and Tourism. 3 Credits.

This course will explore the intersection of social, cultural, environmental, and economic aspects of protected area management in relation to sustainability of resources, tourism, visitor management, conservation, and community development. Case study examples from diverse contexts, settings, and types of terrestrial and aquatic protected areas within the U.S. and around the world will illustrate the complexity of protected area management in a time of rapid change.

NRSM 594 - Seminar. 1-4 Credits.

(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. 1-12 Credits.

(R-12) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one time offerings of current topics. Level: Graduate

NRSM 596 - Independent Study. 1-12 Credits.

(R-12) Offered every term. Prereq., consent of instr. Individual study or research problems. Level: Graduate

NRSM 597 - Graduate Research. 1-15 Credits.

(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. 1-2 Credits.

(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. 1-15 Credits.

(R-15) Offered every term. Professional paper preparation. Level: Graduate

NRSM 622 - Advanced Prolems in Env Policy. 3 Credits.

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. 1-12 Credits.

(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. 1-15 Credits.

(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. 1-15 Credits.

(R-15) Offered every term. Thesis/dissertation preparation. Level: Graduate

Non-Profit Administration (NPAD)

NPAD 166 - Introduction to Public Service. 3 Credits.

Offered every autumn and spring (rotates online and in person). This course acquaints students with the structure, issues and "themes" of public service and stimulates our thinking about how leaders respond (or fail to respond) to public needs.

NPAD 191 - Special Topics. 1-6 Credits.

(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.

NPAD 192 - Independent Study. 1-6 Credits.

(R-6) Offered intermittently. Course material appropriate to the needs and objectives of the individual student.

NPAD 267 - Leadership and Nonprofits. 3 Credits.

Offered online and in person, every semester.

NPAD 392 - Independent Study. 1-6 Credits.

(R-6) Offered intermittently. Course material appropriate to the needs and objectives of the individual student.

NPAD 398 - Internship. 3-6 Credits.

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.

NPAD 466 - Practical Applications in Nonprofit Administration. 3 Credits.

Offered autumn. Prereq., junior standing or consent of instr. Introduction nonprofit management and public service and the complexity of the role of nonprofit organizations in society.

NPAD 467 - Advanced Nonprofit Administration. 3 Credits.

Offered spring. Prereq., PSCI 466 or NPAD 466 and junior standing or consent of instr. In-depth exploration of special advanced issues related to nonprofit management, including fundraising, budgeting, and program planning.

NPAD 492 - Independent Study. 1-6 Credits.

(R-6) Offered intermittently. Course material appropriate to the needs and objectives of the individual student.

NPAD 498 - Internship. 3-6 Credits.

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.

NPAD 501 - Nonprofit Human Resource Management. 2 Credits.

On-line course offered every year. Addresses human resource needs specific to nonprofits, including payroll, employment law, and other legal issues. Level: Graduate

NPAD 502 - Nonprofit Volunteer Management. 2 Credits.

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. Level: Graduate

NPAD 503 - Nonprofit Program Planning & Evalaluation. 2 Credits.

On-line course offered every year. Explores program planning for nonprofits from top-to-bottom, including needs assessment and evaluation. Level: Graduate

NPAD 505 - Nonprofit Advocacy. 2 Credits.

On-line course offered every year. Explores and reviews the role of nonprofit organizations in advocacy. Level: Graduate

NPAD 506 - Nonprofit Board Management. 2 Credits.

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. Level: Graduate

NPAD 510 - Nonprofit Strategic Planning. 2 Credits.

Online course offered every year. This course explores the importance of visionary leadership and strategic planning to the success of nonprofit agencies. Level: Graduate

NPAD 511 - Nonprofit Grant Writing. 2 Credits.

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. Level: Graduate

NPAD 512 - Nonprofit Fundraising. 2 Credits.

Online course offered every year. The course covers 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. Level: Graduate

NPAD 513 - Nonprofit Financial Management. 2 Credits.

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. Level: Graduate

Nursing (NRSG) < University of Montana

Nursing (NRSG)

NRSG 191 - Special Topics. 1-6 Credits.

(R-6) Offered at Missoula College. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

NRSG 192 - Independent Study. 1-6 Credits.

(R-6) Offered intermittently. Offered at Missoula College. Course material appropriate to the needs and objectives of the individual student.

NRSG 230 - Nursing Pharmacology. 3 Credits.

Offered autumn and spring. Offered at Missoula College. Prereq., acceptance into the Registered Nursing Program. This course provides the student with an overview of pharmacology with an emphasis of the study of effects, interactions, and nursing considerations of pharmacologic agents on the client population across the lifespan. The course also explores the ethical, legal, cultural and age implications of pharmacologic therapy across diverse populations and the lifespan.

NRSG 231 - Nursing Pharmacology Lab. 2 Credits.

Offered autumn and spring. Offered at Missoula College. Prereq., acceptance into the Registered Nursing Program. An integration of lab experiences focusing on the basic principles in providing safe medication administration, including intravenous therapy across diverse populations and the lifespan.

NRSG 232 - Foundations of Nursing. 3 Credits.

Offered autumn and spring. Offered at Missoula College. Prereq., acceptance into the Registered Nursing Program. This course provides opportunities to develop competencies necessary to meet the needs of individuals throughout the lifespan in a safe, legal, and ethical manner using the nursing process. Students learn concepts and skills necessary for maintaining standard precautions, physical, psychological and nutritional safety, along with skills needed in therapeutic interventions. Students are introduced to the concepts of professional nursing, patient needs, safety, communication, teaching/learning, critical thinking, ethical-legal, rural nursing, cultural and ethnic diversity, and interdisciplinary patient-centered care.

NRSG 233 - Foundations of Nursing Lab. 3 Credits.

Offered autumn and spring. Offered at Missoula College. Prereq., acceptance into the Registered Nursing Program. An integration of lab experiences focusing on psychomotor nursing skills needed to assist individuals in meeting basic human needs. Application of the nursing process and hands-on learning experiences for nursing skills, patient assessments, nutritional safety, and basic therapeutic skills are practiced and demonstrated.

NRSG 234 - Adult Nursing I. 3 Credits.

Offered autumn and spring. Offered at Missoula College. Prereq., acceptance into the Registered Nursing Program and successful completion of semester 1 of the RN program. This course builds upon the knowledge and skills acquired in Foundations of Nursing, and places them in the context of patient-centered care. Social, cultural, ethical, rural and legal issues, end-of-life and palliative care across diverse adult populations are introduced. Health promotion and prevention throughout the adult lifespan, with specific focus on the geriatric patient, is emphasized. Normal aging, health alterations associated with aging, and their implications are addressed.

NRSG 235 - Adult Nursing I Clinical. 2 Credits.

Offered autumn and spring. Offered at Missoula College. Prereq., acceptance into the Registered Nursing Program and successful completion of semester 1 of the RN program. This clinical introduces the student to nursing practice in care of the stable adult patient. This includes care of the adult in a variety of health care settings. Students utilize the nursing process to develop individualized plans of care to prevent illness, promote wellness and maintain or restore health based on patient needs and evidence based practice.

NRSG 236 - Health and Illness of Maternal Nursing. 2 Credits.

Offered autumn and spring. Offered at Missoula College. Prereq., acceptance into the Registered Nursing Program and successful completion of semester 1 of the RN program. In this course, the student applies holistic concepts to the professional nursing care of the childbearing family including conception, prenatal, intrapartum, postpartum and newborn care. Content addresses health and complex alterations, reproduction and menopause, nutrition, therapeutic communication, ethical, legal, cultural and evidenced-based practice.

NRSG 237 - Health and Illness of Maternal Nursing Clinical. 1 Credit.

Offered autumn and spring. Offered at Missoula College. Prereq., acceptance into the Registered Nursing Program and successful completion of semester 1 of the RN program. This clinical introduces the student to the role of the registered nurse in the care of the childbearing family. Students will utilize the nursing process to assess and develop individualized plans of care for mother and infant. Emphasis will be placed on patient education to promote healthy mother infant and childbearing family bonding.

NRSG 244 - Adult Nursing II. 3 Credits.

Offered autumn and spring. Offered at Missoula College. Prereq., acceptance into the Registered Nursing Program and successful completion of semester I and II of the RN program. This course builds upon previous knowledge of the nursing process and care of the patient experiencing acute and chronic disease alterations. Pathophysiologic processes are discussed as related to evidence-based nursing interventions. Students apply the nursing process, nutritional therapy, and pharmacological therapy utilizing interdisciplinary practice to promote, maintain, and restore health across the adult lifespan.

NRSG 245 - Adult Nursing II Clinical. 2 Credits.

Offered autumn and spring. Offered at Missoula College. Prereq., acceptance into the Registered Nursing Program and successful completion of semester I and II of the RN program. In this clinical experience the student will provide care for individuals and families experiencing acute health alterations, and those associated with chronic disease processes. Students use the nursing process to systematically analyze information to plan and implement nursing interventions which are individualized and founded on evidence-based practice.

NRSG 246 - Health and Illness of Child and Family Nursing. 2 Credits.

Offered autumn and spring. Offered at Missoula College. Prereq., acceptance into the Registered Nursing Program and successful completion of semester I and II of the RN program. In this course, the student applies holistic concepts to the professional nursing care of children and their families in health, illness, end-of-life and palliative care.Emphasis is placed on incorporating growth and developmental principles to facilitate positive health outcomes through health promotion, nutrition and disease prevention.

NRSG 247 - Health and Illness of Child and Family Nursing Clinical. 1 Credit.

Offered autumn and spring. Offered at Missoula College. Prereq., acceptance into the Registered Nursing Program and successful completion of semester I and II of the RN program. In this clinical, students will utilize the nursing process, to provide nursing care of healthy and high-risk pediatric populations and their families experiencing disruptions in bio/psycho/social/cultural and spiritual needs. Emphasis is also placed on health promotion, health maintenance, and therapeutic communication.

NRSG 254 - Mental Health Concepts. 2-3 Credits.

Offered autumn and spring. Offered at Missoula College. Prereq., acceptance into the Registered Nursing Program and successful completion of semester I and II of the RN program. In this course, the student focuses on the nursing concepts utilizing basic human needs, developmental theory, nursing process, therapeutic communication, and nursing interventions to promote and maintain health for clients and families experiencing mental-health issues. The student will examine client responses to stressors across the life span. Tasks of biological-behavioral concepts in psychosocial nursing care, rural and cultural impacts will be addressed.

NRSG 255 - Mental Health Concepts Clinical. 1 Credit.

Offered autumn and spring. Offered at Missoula College. Prereq., acceptance into the Registered Nursing Program and successful completion of semester I and II of the RN program. This clinical applies the knowledge of psychiatric and mental health nursing. Students will have mental health focused clinical experiences in a variety of settings.

NRSG 256 - Pathophysiology. 3 Credits.

Offered spring and autumn. Offered at Missoula College. Prereq., successful acceptance into the Registered Nursing program. This course introduces the student to the basic principles and processes of pathophysiology including cellular communication, genes and genetic disease, forms of cellular injury, nutrition, fluid and electrolyte/acid base balance, immunity, stress coping and illness, and tumor biology. Pathophysiology of the most common alterations according to body systems will be discussed as well as the latest developments in research and patient-centered nursing interventions.

NRSG 259 - Adult Nursing III. 3 Credits.

Offered autumn and spring. Offered at Missoula College. Prereq., acceptance into the Registered Nursing Program and successful completion of semester I, II and III of the RN program. This course expands on the nursing role in care of patients with complex health alterations. Students utilize evidence-based, interdisciplinary interventions to meet patient and family needs.

NRSG 260 - Adult Nursing III Lab. 1 Credit.

Offered autumn and spring. Offered at Missoula College. Prereq., acceptance into the Registered Nursing Program and successful completion of semester I, II and III of the RN program. In this lab students are introduced to basic electrocardiogram interpretation, advanced concepts of perfusion, ventilation and complex pharmacologic regimens.

NRSG 261 - Adult Nursing III Clinical. 2 Credits.

Offered autumn and spring. Offered at Missoula College. Prereq., acceptance into the Registered Nursing Program and successful completion of semester I, II and III of the RN program. This clinical experience focuses on application of the nursing process and utilization of information to provide comprehensive nursing care to the acutely ill patient experiencing complex health alterations in a variety of settings. Emphasis is placed on prioritization of care and collaboration with other members of the interdisciplinary team to ensure optimal client care.

NRSG 266 - Managing Client Care for the Registered Nurse. 2 Credits.

Offered autumn and spring. Offered at Missoula College. Prereq., acceptance into the Registered Nursing Program and successful completion of semester I, II and III of the RN program. In this course students examine concepts of leadership and management emphasizing prioritization, delegation, and supervision of nursing care for patients across the lifespan. Topics also include communication techniques, legal and ethical issues, care of the culturally diverse patient, and utilizing change theory. Healthcare policy, finance, and regulatory environment issues are explored and applied to planning, collaborating and coordinating care across the continuum.

NRSG 267 - Managing Client Care for the Registered Nurse Clinical. 2 Credits.

Offered autumn and spring. Offered at Missoula College. Prereq., acceptance into the Registered Nursing Program and successful completion of semester I, II and III of the RN program. This precepted clinical experience focuses on principles of nursing leadership and management in a variety of settings. Students apply knowledge to provide culturally competent, holistic interventions within the professional nursing role for individuals, communities, and families across the lifespan.

NRSG 291 - Special Topics. 1-6 Credits.

Offered at Missoula College. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

NRSG 292 - Independent Study. 1-6 Credits.

(R-6) Offered at Missoula College. Course material appropriate to the needs and objectives of the individual student.

Nutrition (NUTR) < University of Montana

Nutrition (NUTR)

NUTR 221N - Basic Human Nutrition. 3 Credits.

Offered autumn and spring. The principles of science as applied to current concepts and controversies in the field of human nutrition.

Gen Ed Attributes: Natural Science Course (N)

NUTR 411 - Nutrition For Sports & Exercise. 3 Credits.

Offered autumn and spring. Prereq., KIN 320 and junior standing. Nutritional parameters of athletic performance including intervention planning, energy production, the energy nutrients, vitamins and minerals, principles of balanced diets, timing and composition of intakes, hydration, weight management strategies, and nutritional needs for special situations.

Parks, Tourism & Recreation Management (PTRM) < University of Montana

Parks, Tourism & Recreation Management (PTRM)

PTRM 141Y - National Parks and American Culture. 3 Credits.

Offered autumn. This course introduces undergraduates to contemporary issues in managing the places and programs that make up the U.S. national park system. Students will learn about the variety of resources, values, viewpoints, and ideas that are represented in the more than 400 units of the national park system, which stretches from Guam to Maine and Alaska to the Virgin Islands. The role of the federal agency in charge of the parks, the National Park Service (NPS), will be explored, including its work in community recreation and historic preservation. Particular attention will be given to the social, cultural and historical context of how the National Park Service was developed and evolved. There are no pre-requisites.

Gen Ed Attributes: Democracy and Citizenship (Y)

PTRM 150 - Current Issues in PTRM. 1 Credit.

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. 1-6 Credits.

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

PTRM 210S - Nature Tourism & Comm Rec. 3 Credits.

Offered spring. 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.

Gen Ed Attributes: Social Sciences Course (S)

PTRM 217S - Parks & Outdoor Rec. Mgmt.. 3 Credits.

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.

Gen Ed Attributes: Social Sciences Course (S)

PTRM 291 - Special Topics. 1-6 Credits.

(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. 3 Credits.

Offere 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-base tourism fields.

PTRM 310 - Nat Res Interp and Comm. 3 Credits.

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.

PTRM 345X - Sustaining Human Soc & Nat Env. 3-6 Credits.

Offered 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.

Gen Ed Attributes: Cultural Intl Diversity (X)

PTRM 353 - Tourism, Livelihoods and Sustainability in Mountains. 3 Credits.

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 355 - Wild. Med. And Risk Mgmt.. 5 Credits.

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. 5 Credits.

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 Sheriffs Search and Rescue team, as well as training in rescue helicopter operations with St. Patrick Hospitals 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 380 - Rec Admin & Leadership. 3 Credits.

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. 1-12 Credits.

(R-12) Offered intermittently. Experimental offerings of visiting professors, new courses, or one-time offerings of current topics.

PTRM 392 - Independent Study. 1-6 Credits.

(R-6) Offered every term. Course material appropriate to the needs and objectives of the individual student.

PTRM 394 - Seminar. 1-4 Credits.

(R-4) Offered intermittently. Variable topics by visiting scholars.

PTRM 398 - Internship. 1-6 Credits.

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.

PTRM 407 - Mnging Rec Res in Wilderness. 3 Credits.

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. 3 Credits.

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.

PTRM 450 - Pre-Practicum Prof Prep. 1 Credit.

Offered spring. A pre-practicum class to provide orientation for the practicum, PTRM 495 (RECM 460).

PTRM 451 - Tourism & Sustainability. 3 Credits.

Offered autumn. Prereq., WRIT 101 or equivalent, one intermediate writing course and PTRM 210S, or consent of instructor. Theories and conceptual models are applied to analyzing relationships between the integration of planning theories to sustainability concepts.

Gen Ed Attributes: Writing Course-Advanced

PTRM 482 - Wilderness & Protected Area Management. 3 Credits.

Offered autumn. Prereq., WRIT 101 or equivalent, one intermediate writing course and 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.

Gen Ed Attributes: Writing Course-Advanced

PTRM 484 - PTRM Field Measurement Tech. 3 Credits.

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. 3 Credits.

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 486 - Commercial Recreation, Marketing and Tourism. 3 Credits.

Offered spring. Prereq., PTRM 210S and PTRM 217. Together, commercial recreation and tourism represent a large portion of the economies of many cities, counties, states and countries. As such, the recreation and tourism industry contributes significantly to economies all over the world. In this course, we will examine breadth of commercial recreation and tourism enterprises and their economic impacts at all levels from the local to the global. In addition, we will explore the impacts of commercial recreation and tourism on our society and environment. Taking an entrepreneurial approach, we will explore and develop our understanding of business and marketing concepts as they relate to commercial recreation and tourism through real-world examples and case studies. Level: Undergraduate

PTRM 491 - Special Topics. 1-12 Credits.

(R-12) Offered intermittently. Experimental offerings of visiting professors, new courses or one-time offerings of current topics.

PTRM 492 - Independent Study. 1-6 Credits.

(R-6) Offered every term. Prereq., consent of instr. Individual study of research problems.

PTRM 494 - Seminar. 1-4 Credits.

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. 1-6 Credits.

(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.

PTRM 498 - Internship. 1-6 Credits.

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.

PTRM 499 - Senior Thesis. 1-3 Credits.

(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. 3 Credits.

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 510 - Professional Paper Research Methods. 3 Credits.

PTRM 511 - Risk management and leadership in PTRM contexts. 3 Credits.

Offered Autumn. This course is to provide students with an understanding of the interface between risk management and leadership concepts in the field of parks, tourism, and recreation. Working in outdoor settings presents a variety of challenges that can have diverse types and scales of risks. This class will orient students to the best practices in managing risks across PTRM settings and help students craft their own risk management plans. Effective leadership is critical in managing risk and to achieving desired outcomes. This class will focus on leadership models and provide students with opportunities to demonstrate effective leadership through critical thinking and application.

PTRM 512 - Human Behavior in Outdoor Recreation and Tourism. 3 Credits.

Offered autumn. This course is to provide students with an understanding of the social, psychological, and behavioral constructs in the field of parks, tourism, and recreation management. The course will encompass historical, theoretical, and empirical foundations of relative to human behavior in park, recreation, and tourism settings with a focus on the attitudinal, social, and motivational theories as applied to leisure-related contexts.

PTRM 517 - Advanced Visitor Mgmt. 3 Credits.

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.

PTRM 525 - Evolving Foundations of Protected Area Management. 3 Credits.

This course is about why the concept of nature protection has grown to a global phenomenon and how the idea of protection or preservation has evolved over time. Level: Graduate

PTRM 526 - Protected Area Planning in an Era of Turbulence & Complexity: Concepts & Principles. 3 Credits.

In this course we will explore the varying dimensions of protected area planning in the world of 21st century change and complexity, providing participants with perspectives useful in assessing new ways of developing the processes underlying effective plans. Level: Graduate

PTRM 527 - Global Ecology, Conservation & Natural Resource Management in a Changing World. 3 Credits.

This course will first examine biological and physical environmental processes, then exploring these processes within the context of resource management and conservation, and finally focusing on the application of these learned skills to case studies, students will understand how to apply ecological theory to real world challenges in protected areas management and global conservation initiatives. Level: Graduate

PTRM 528 - Tourism & Protected Area Management: Striving for Sustainability. 3 Credits.

This course will explore ideas of development and sustainability as they pertain to tourism in the context of protected areas. We will critically assess, through case studies and other readings, the opportunities and challenges for implementing sustainable tourism in protected area context from an economic, social and environmental perspective. Level: Graduate

PTRM 529 - Applied Principles & Concepts for Protected Area Management. 3 Credits.

This course is intended to be a capstone course for the Protected Area Distance Education Program. As such, the course will be the last in the sequence and will draw from the principles and concepts introduced in the previous courses. These principles and concepts will be applied in a real-world context in order to address a challenge or opportunity in a given protected area. Level: Graduate

PTRM 554 - Geographies of Tourism. 3 Credits.

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 555 - Conservation and Development in Mountains. 2 Credits.

Offered in odd numbered years. This course explores concepts and issues related to conservation and development in mountain regions. The course covers mountain geography, concepts of conservation and development and then explores conservation and development issues in mountain regions around the world.

PTRM 562 - Manage Rec Res Wilderness. 3 Credits.

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 Dimensions. 3 Credits.

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 582 - Concept of Wilderness & PA. 3 Credits.

(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

PTRM 583 - Research & Dev. Tourism & Rec.. 3 Credits.

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 584 - Sustainable Protected Area Management and Tourism. 3 Credits.

This course will explore the intersection of social, cultural, environmental, and economic aspects of protected area management in relation to sustainability of resources, tourism, visitor management, conservation, and community development. Case study examples from diverse contexts, settings, and types of terrestrial and aquatic protected areas within the U.S. and around the world will illustrate the complexity of protected area management in a time of rapid change.

PTRM 594 - Conservation Soc Sci Seminar. 1-2 Credits.

(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. 1-12 Credits.

(R-12) Offered intermittently. Experimental offerings of visiting professors, new courses, or one-time offerings of current topics. Level: Graduate

PTRM 596 - Independent Study. 1-10 Credits.

(R-10) Offered every term. Prereq., consent of instr. Individual study or research problems. Level: Graduate

PTRM 597 - Research. 1-12 Credits.

(R-12) Offered every term. Prereq., graduate standing. Independent graduate research in parks, tourism, and recreation management. Level: Graduate

PTRM 598 - Internship. 1-12 Credits.

(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

PTRM 599 - Professional Paper. 1-15 Credits.

(R-15) Offered every term. Preparation of professional paper. Level: Graduate

PTRM 695 - Special Topics. 1-6 Credits.

(R-6) Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. Level: Graduate

PTRM 697 - Research. 1-15 Credits.

(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. 1-15 Credits.

(R-15) Offered every term. Prereq., graduate standing. Preparation of thesis/dissertation. Level: Graduate

Pharmacy (PHAR) < University of Montana

Pharmacy (PHAR)

PHAR 100 - Intro Pharm Practice for Techs. 3 Credits.

Offered autumn. Offered at Missoula College. 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. 3 Credits.

Offered autumn. Offered at Missoula College. 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. 6 Credits.

Offered autumn. Offered at Missoula College. 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. 3 Credits.

Offered autumn. Offered at Missoula College. Prereq., admission into Pharmacy Technology Program. Develop dispensing and distributive skills with hands-on lab, and lecture format.

PHAR 110N - Use & Abuse of Drugs. 3 Credits.

Offered autumn and spring. Drug dependence and abuse.

Gen Ed Attributes: Natural Science Course (N)

PHAR 120 - Medication Safety. 3 Credits.

Offered spring online only. Offered at Missoula College. 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 121 - Preparation for the PTCB Exam. 1 Credit.

Offered at Missoula College. Prereq., PHAR 100, PHAR 101, PHAR 102 and PHAR 104. This course will offer strategies in test taking, and help students refresh their knowledge in all knowledge areas included in the exam as identified by PTCB.

PHAR 191 - Special Topics. 1-6 Credits.

(R 16) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one time offerings of current topics.

PHAR 192 - Independent Study. 1-6 Credits.

(R-6) Offered at Missoula College. Offered intermittently. Course material appropriate to the needs and objectives of the individual student.

PHAR 198 - Internship: Pharmacy. 4 Credits.

(R-8) Offered spring. Offered at Missoula College. 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.

PHAR 300 - Pharmacy Practice I. 4 Credits.

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. 2 Credits.

Offered spring. Prereq., PHAR 300. Federal and state laws and regulations pertaining to pharmacy practice. Introductory dispensing laboratory.

PHAR 311 - Healthy People. 1 Credit.

Offered spring. Prereq., first professional year standing in pharmacy. Determinants of health, teamwork, communication, reflection, and self- and peer-assessment methods are explored in the classroom, through writings, and team projects in the community.

PHAR 320 - Am Ind Health Issues. 3 Credits.

Offered spring. An overview of the health issues, health care delivery, health disparities, and social determinants of health that impact American Indians. Also, provides an overview in careers in health and cultural awareness for students.

PHAR 322 - Ayurvedic Medicine. 1 Credit.

Ayurveda is an ancient East Indian tradition of health and healing that involves diet, lifestyle, and herbal supplements. This course will focus on understanding the basic principles of Ayurveda in terms of Dosha, diet, lifestyle, herbs, body therapies, and the disease process. Students will create an individualized lifestyle plan focusing on diet and lifestyle aimed to improve health and well-being.

PHAR 324 - Medicinal Plants. 2-3 Credits.

Offered autumn. Plants and other natural substances which nourish, heal, injure, or alter the conscious mind.

PHAR 329 - Microbes & Medicines. 4 Credits.

Offered spring. Prereq., first professional year standing in pharmacy. Microorganisms that cause disease in humans plus the chemical characteristics, biochemical mechanisms, and pharmacological properties of drugs used in treating infections caused by microorganisms.

PHAR 331 - Pharmaceutics. 4 Credits.

Offered spring. Prereq., first professional year standing. Physical pharmacy and dosage forms.

PHAR 341 - Pharmaceutical Pathophysiology I. 4 Credits.

Offered autumn. Prereq., first professional year standing in pharmacy. Principles of anatomy, normal and abnormal physiology.

PHAR 342 - Pharmaceutical Pathophysiology II. 4 Credits.

Offered spring. Prereq., PHAR 341. Continuation of 341.

PHAR 350 - Drug Info. 1 Credit.

Offered autumn. Prereq., WRIT 101 or equivalent, one intermediate writing course and first professional year standing in pharmacy. Introduction to sources of drug information and the use of medical literature and clinical guidelines to respond to drug information requests from patients and healthcare providers.

Gen Ed Attributes: Writing Course-Advanced

PHAR 360 - Pharmacy Practice Lab I. 1 Credit.

Offered autumn. Prereq., first professional year standing and coreq., PHAR 300. This lab is designed to introduce the student to the technical and legal aspects of drug dispensing, prescription and OTC drug counseling, and sterile intravenous (IV) admixture in a simulated pharmacy environment.

PHAR 361 - Pharm Sci Lab I. 1 Credit.

Offered autumn. Prereq., first professional year standing and coreq., PHAR 300, PHAR 341. Laboratory experience in the pharmaceutical sciences.

PHAR 362 - Pharm Sci Lab II. 1 Credit.

Offered spring. Prereq., PHAR 361 and Coreq., PHAR 331 and 342. Continuation of 361.

PHAR 371 - Integrated Studies I. 1 Credit.

Offered autumn. 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. 1 Credit.

Offered spring. Prereq., PHAR 371. Continuation of 371.

PHAR 381 - Pharmaceutical Biochemistry. 4 Credits.

Offered autumn. Prereq., first professional year standing. 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. 1-3 Credits.

(R-6) Offered autumn and spring. Prereq., consent of instr. Individual participation in library or laboratory research.

PHAR 391 - Special Topics. 1-9 Credits.

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

PHAR 392 - Independent Study. 1-3 Credits.

PHAR 395 - Pharmacy Practicum. 1-2 Credits.

(R-3) Offered autumn and spring. Prereq., PHAR 300. Supervised professional experience in the Student Health Service Pharmacy.

PHAR 412 - Pharmacy Practice III. 2 Credits.

Offered spring. Prereq., second professional year standing. The social, behavioral, cultural, and literacy factors involved in professional communication and patient care.

PHAR 421 - Medicinal Chem I. 3 Credits.

Offered autumn. Prereq., second professional year standing or consent of instr. The chemistry of organic compounds used medicinally and their biochemical mechanisms of action.

PHAR 422 - Medicinal Chem II. 3 Credits.

Offered spring. Prereq., PHAR 421. Continuation of 421.

PHAR 430 - Pharmacogenetics. 2 Credits.

Offered each semester. Prereq., PHAR 341 and PHAR 381. The genetic basis of differential drug activity.

PHAR 432 - Clinical Pharmacokinetics. 3 Credits.

Offered autumn. Prereq., second professional year standing. Principles of pharmacokinetics including the processes of ADME (absorption, distribution, metabolism, and elimination) and applications in the clinical setting.

PHAR 443 - Pharmacol & Toxicol I. 4 Credits.

Offered autumn. Prereq., second professional year standing or consent of instr. Basic principles of pharmacology, toxicology and therapeutics.

PHAR 444 - Pharmacology & Toxicol II. 4 Credits.

Offered spring. Prereq., PHAR 443. Continuation of PHAR 443.

PHAR 445 - Immunopharm/Immunotox. 3 Credits.

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 451 - Therapeutics I. 3 Credits.

Offered autumn. Prereq., second professional year standing; coreq., PHAR 471; prereq., PHAR 381, PHAR 331, PHAR 342. 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. 3 Credits.

Offered spring. Prereq., PHAR 451; coreq., PHAR 472; prereq. or coreq., PHAR 422, PHAR 432 and PHAR 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. 1 Credit.

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. 1 Credit.

Offered spring. 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. 1 Credit.

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. 1 Credit.

Offered spring. Prereq., PHAR 471. Continuation of 471. Offered for CR/NCR only.

PHAR 480 - Community Pharmacy IPPE. 3 Credits.

(R-6) Offered every term. Prereq., completion of first professional year. Supervised professional experience in community pharmacy.

PHAR 481 - Hospital Pharmacy IPPE. 3 Credits.

(R-6) Offered every term. Prereq., completion of first professional year. Supervised professional experience in a hospital pharmacy.

PHAR 484 - Introduction to Toxicology. 3 Credits.

Offered autumn. Prereq., Biology, Chemistry, and Biochemistry; or consent of instr. Online. Introduction to environmental health and the principles of toxicology, including 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 and Rural Health. 3 Credits.

Offered spring. Prereq., Biology, Chemistry, Biochemistry, and Intro. Toxicology; or consent of instr. Online. Principles, concepts and applications of environmental health, including methods and paradigm used in the field ranging from ecology to epidemiology, from toxicology to environmental psychology, and from genetics to ethics. This course provides students with a comprehensive introduction to environmental health.

PHAR 486 - Epidemiology and Clinical Translational Research. 3 Credits.

Offered autumn. Prereq., Biology, Chemistry, Biochemistry, Statistics, and Intro. Toxicology; or consent of instr. Online. Introduction to the principles and methods for epidemiologic and clinical investigation, including biostatistical applications, conducting and interpreting epidemiological and clinical studies in environmental toxicology. Graduate increment includes design and analysis of an epidemiological study and leading class discussions.

PHAR 490 - Undergraduate Research. 1-3 Credits.

(R-6) Offered autumn and spring. Prereq., consent of instr. Individual participation in library or laboratory research.

PHAR 491 - Special Topics. 1-9 Credits.

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

PHAR 494 - Seminar. 1-6 Credits.

(R-6) Offered intermittently. Varying topics.

PHAR 498 - Internship. 1-6 Credits.

PHAR 505 - Pharmacy Practice IV. 3 Credits.

Offered autumn. Prereq., third professional year standing in pharmacy. Applications of advanced drug therapy monitoring and disease state management. Level: Graduate

PHAR 506 - Pharmacy Practice V. 3 Credits.

Offered spring. Prereq., PHAR 505. Aspects of pharmacy management, including human resources, quality improvement, financail, and administrative policies and procedures involved in providing patient care. Level: Graduate

PHAR 514E - Case Studies Pharm Ethics. 3.000 Credits.

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

Gen Ed Attributes: Ethical & Human Values Course

PHAR 550 - Drug Literature Eval. 3.000 Credits.

Offered autumn. Prereq., WRIT 101 or equivalent, one intermediate writing course and 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

Gen Ed Attributes: Writing Course-Advanced

PHAR 553 - Therapeutics III. 4 Credits.

Offered autumn. Prereq., PHAR 452, 472: coreq., PHAR 571, and third professional year standing. 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. 4 Credits.

Offered spring. Prereq., PHAR 553 and coreq., PHAR 572. 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. 2 Credits.

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 559 - Public Health and Pharmacoeconomics. 3 Credits.

Offered autumn. Prereq., third professional year or consent of instr. Covers concepts in public health, epidemiology, pharmacoeconomics, and outcomes research that shape health policy and professional practice. Level: Graduate

PHAR 560 - Pharmaceutical Care Lab IV. 1 Credit.

Offered autumn. Coreq., PHAR 505. Practice in professional communication and pharmaceutical care interventions and recommendations. Level: Graduate

PHAR 563 - Pharmaceutical Care Lab V. 1 Credit.

Offered spring. Coreq., PHAR 554. Practice in professional communication and pharmaceutical care interventions and recommendations. Level: Graduate

PHAR 565 - Pharmacy APPE Preparation. 3 Credits.

Offered spring. Coreq., PHAR 563. Review and updates on pharmacotherapeutic topics with preparation for and orientation to the final experiential year of the professional pharmacy program. Level: Graduate

PHAR 571 - Integrated Studies V. 1 Credit.

Offered autumn. Prereq., third professional year standing in pharmacy and coreq., PHAR 553. 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. 1 Credit.

Offered spring. Prereq., third professional year standing in pharmacy, coreq., PHAR 554. Small group conferences designed to develop professional skills while integrating material from other pharmacy courses. Level: Graduate

PHAR 579 - Comm Pharm APPE. 1-12 Credits.

(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. 4 Credits.

(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. 4-12 Credits.

(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. 4-16 Credits.

(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. 4 Credits.

(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. 4 Credits.

(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. 4 Credits.

(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. 4 Credits.

(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. 4 Credits.

(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. 4 Credits.

(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. 4 Credits.

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 591 - Special Topics. 1-12 Credits.

(R-12) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one time offerings of current topics. Level: Graduate

PHAR 596 - Independent Study. 1-9 Credits.

(R-9) Offered every term. Course material appropriate to the needs and objectives of the individual student. Level: Graduate

Philosophy (PHL)

PHL 101Y - Introduction to Philosophy. 3 Credits.

(R-12) Offered yearly. An introduction to philosophy through examination of the thought of selected great philosophers or traditional positions on classical philosophical problems.

Gen Ed Attributes: Lit & Artistic Studies (L), Democracy and Citizenship (Y)

PHL 102Y - Topical Intro to Philosophy. 3-4 Credits.

(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).

Gen Ed Attributes: Lit & Artistic Studies (L), Democracy and Citizenship (Y)

PHL 110E - Introduction to Ethics. 3.000 Credits.

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.

Gen Ed Attributes: Ethical & Human Values Course

PHL 112E - Intro Ethics and Environment. 3.000 Credits.

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 that covers animal welfare, biotechnology, and other current topics.

Gen Ed Attributes: Ethical & Human Values Course

PHL 114E - Intro to Political Ethics. 3 Credits.

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.

Gen Ed Attributes: Ethical & Human Values Course

PHL 191 - Special Topics. 1-6 Credits.

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

PHL 198 - Internship. 1-6 Credits.

(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.

PHL 210E - Moral Philosophy. 3 Credits.

Offered autumn and spring. Prereq., philosophy major or minor, WRIT 101 (or higher) or equivalent 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.

Gen Ed Attributes: Ethical & Human Values Course, Writing Course-Intermediate

PHL 233 - Intro to Logic: Deduction. 3 Credits.

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. 3 Credits.

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. 3 Credits.

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.

Gen Ed Attributes: Historical Studies, Natural Science Course (N)

PHL 261Y - History of Ancient Philosophy. 3 Credits.

Offered yearly. Introduction to the central works of Plato and Aristotle, with an overview of Presocratic philosophy.

Gen Ed Attributes: Democracy and Citizenship (Y)

PHL 262Y - History of Modern Philosophy. 3 Credits.

Offered spring. A survey of the history of philosophy from Descartes to Kant, which includes other continental rationalists and the British Empiricists.

Gen Ed Attributes: Democracy and Citizenship (Y)

PHL 291 - Special Topics. 1-6 Credits.

(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. 1-6 Credits.

(R-6) Offered intermittently. Course material appropriate to the needs and objectives of the individual student.

PHL 298 - Internship. 1-6 Credits.

(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.

PHL 301 - Knowledge and Reality. 3 Credits.

(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. 3 Credits.

(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. 3 Credits.

(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 317E - Law and Morality. 3 Credits.

Offered intermittently. Prereq., upper-division standing or consent of instr. An examination of moral issues that arise in legal contexts, such as: justifications of state power to punish wrong doing, justifications for rights to private property or privacy, the nature of human rights.

Gen Ed Attributes: Ethical & Human Values Course, Democracy and Citizenship (Y)

PHL 318 - Applied Logic. 3 Credits.

Offered spring. Analytical thinking skills involve the ability to assess reasons, arguments, and evidence provided in support of a claim. The course focuses on basic elements of both deductive and inductive logic. Students will develop their analytical thinking skills in logically assessing various forms of reasoning in various contexts: logic games, short arguments, and more developed reading excerpts -- independently of subject matter.

PHL 321E - Philosophy & Biomedical Ethics. 3 Credits.

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.

Gen Ed Attributes: Ethical & Human Values Course

PHL 323 - Ethics of Climate Change. 3 Credits.

This course examines some of the fundamental issues raised by global climate change and considers 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 examines alternative understandings of the appropriate relationship between humans and the natural world including: ?Deep Ecology? and Native American perspectives.

PHL 351 - Philosophy and Feminism. 3 Credits.

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 363H - Ancient Greek and Roman Philosophy. 3 Credits.

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.

Gen Ed Attributes: Historical Studies

PHL 370 - Philosophy of Religion. 3 Credits.

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. 1-9 Credits.

(R-9) Offered intermittently. Prereq., consent of instr. Directed individual research and study appropriate to the background and objectives of the student.

PHL 391 - Special Topics. 1-9 Credits.

(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. 1-9 Credits.

(R-9) Offered intermittently. Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student.

PHL 394 - Seminar. 1-9 Credits.

(R-9) Offered intermittently. Prereq., consent of instr. A review and discussion of current research. Topics vary.

PHL 398 - Internship. 1-6 Credits.

(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.

PHL 403 - Early Wittgenstein. 3 Credits.

Offered intermittently. Prereq., upper-division standing and PHL 233, or consent of instr. Reading and interpretation of selected early works of Wittgenstein.

PHL 404 - Later Wittgenstein. 3 Credits.

Offered intermittently. Prereq., upper-division standing and PHL 233, or consent of instr. Reading and interpretation of selected later works of Wittgenstein.

PHL 407 - Epistemology. 3 Credits.

Offered intermittently. Prereq., upper-division standing, PHL 210E and PHL 233, or consent of instr. Examination of philosophical issues involving knowledge and justified belief.

PHL 408 - Philosophy of Mind. 3 Credits.

(R-9) Offered intermittently. Prereq., upper-division standing, PHL 210E and PHL 233, or consent of instr. Examination of philosophical issues concerning the relation between mind and body.

PHL 412 - Ethics and Public Affairs. 3 Credits.

Offered intermittently. Prereq., upper-division standing and PHL 110E or PHL 112E or PHL 114E or 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. 3 Credits.

Offered once every two years. Prereq., upper-division standing and PHL 110E or PHL 112E or PHL 114E or 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. 3-4 Credits.

(R-9) Offered intermittently. Prereq., upper-division 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. 3 Credits.

Offered intermittently. Prereq., upper-division standing and PHL 110E or PHL 112E or PHL 114E or PHL 210E, or consent of instr. Philosophical thought in selected works of literature.

PHL 445 - Central Issues in Philosophy of Science. 3 Credits.

Offered intermittently. Prereq., upper-division standing, PHL 210E, and PHL 233, 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 - History of Moral and Political Philosophy. 3 Credits.

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 - Contemporary Moral/Political Theory. 3 Credits.

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 - Philosophy of Society and Culture. 3 Credits.

Offered intermittently. Prereq., upper-division standing and PHL 110E or PHL 112E or PHL 114E or 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. 3 Credits.

(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. 3 Credits.

Offered intermittently. Prereq., upper-division standing, PHL 210E, and PHL 262Y, or consent of instr. Reading and interpretation of selected works.

PHL 465 - Plato. 3 Credits.

Offered intermittently. Prereq., upper-division standing, PHL 210E, and PHL 261Y, or consent of instr. Reading and interpretation of selected works.

PHL 466 - Aristotle. 3 Credits.

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 Philosophy. 3 Credits.

(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 Philosophy. 3 Credits.

(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. 1-9 Credits.

(R-9) Offered intermittently. Prereq., consent of instr. Directed individual research and study appropriate to the background and objectives of the student.

PHL 491 - Special Topics. 1-9 Credits.

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

PHL 492 - Independent Study. 1-9 Credits.

(R-9) Offered intermittently. Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student.

PHL 494 - Seminar. 1-9 Credits.

(R-9) Offered intermittently. Prereq., consent of instr. A review and discussion of current research. Topics vary.

PHL 498 - Internship. 1-6 Credits.

(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.

PHL 499 - Senior Seminar. 3 Credits.

(R-9) Offered spring. Prereq., WRIT 101 or equivalent, one intermediate writing course, senior standing and philosophy major or philosophy minor, or consent of instr. Research in problems in philosophy.

Gen Ed Attributes: Writing Course-Advanced

PHL 501 - Philosophy of Technology. 3 Credits.

(R-6) Offered once every two years. Reading and interpretation of selected writings that address central issues in the philosophy of technology. Level: Graduate

PHL 502 - Topics in Value Theory. 3 Credits.

(R-6) Offered once every two years. Reading and interpretation of selected writings in value theory. Level: Graduate

PHL 504 - Topics in Environmental Philosophy. 3 Credits.

(R-9) Offered once every two years. 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 - Issues in the Anthropocene. 3 Credits.

(R-6) Offered once every two years. Reading and interpretation of selected writings in contemporary environmental philosophy. Level: Graduate

PHL 507 - Philosophical Foundations of Ecology. 3 Credits.

Offered once every two years. In this seminar we will look at some of the key papers in philosophy of ecology (and perhaps, more broadly, environmental philosophy). Some of the topics covered will be: whether nature can be thought to be in balance, the complexity-stability debate, the role and nature of models in ecology, whether there are laws of ecology, whether communities and ecosystems are "super-organisms" or simple aggregates, what biodiversity is and why we should care about it. Level: Graduate

PHL 510 - Phil Forum Colloquium. 1 Credit.

(R-3) Offered autumn and spring. Prereq., graduate standing. Discussion and further exploration of issues presented at the weekly Philosophy Forum. Level: Graduate

PHL 590 - Research. 1-9 Credits.

(R-9) Offered intermittently. Prereq., consent of instr. Directed individual research and study appropriate to the background and objectives of the student.

PHL 591 - Special Topics. 1-9 Credits.

(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. 1-9 Credits.

(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. 1-9 Credits.

(R-9) Offered intermittently. Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student. Level: Graduate

PHL 594 - Seminar. 1-9 Credits.

(R-9) Offered intermittently. A review and discussion of current research. Topics vary. Level: Graduate

PHL 598 - Internship. 1-12 Credits.

(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

PHL 599 - Thesis. 1-6 Credits.

(R-9) Offered every semester. Prereq., approval of a thesis proposal by the student's thesis committee. Level: Graduate

Physical Therapy (P T) < University of Montana

Physical Therapy (P T)

P T 503 - PT and Health Care System. 4 Credits.

Offered autumn. Prereq., enrolled in entry-level DPT program or permission of instructor. 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. 5 Credits.

Offered autumn. Prereq., enrolled in entry-level DPT program or permission of instructor. 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. 5 Credits.

Offered autumn. Prereq., enrolled in entry-level DPT program or permission of instructor. 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. 3 Credits.

Offered spring. Enrolled in entry-level DPT program or permission of instructor. 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 the Life Span. 2 Credits.

Offered spring. Prereq., enrolled in entry-level DPT program or permission of instructor. 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. 1 Credit.

Offered autumn. Prereq., enrolled in entry-level DPT program or permission of instructor. Introduction to medical screening within the patient/client Management model. Level: Graduate

P T 524 - Clinical Medicine II. 2 Credits.

Offered autumn. Prereq., enrolled in entry-level DPT program or permission of instructor. Introduction to pharmacology, medical management of selected orthopedic and hematological conditions. Level: Graduate

P T 525 - Clinical Medicine III. 3 Credits.

Offered autumn. Prereq., enrolled in entry-level DPT program and passed all previous DPT courses or permission of instructor. Pathophysiology, medical and pharmacological management of genitourinary, obstetric, oncological, immunological diseases and organ transplantation. Level: Graduate

P T 526 - Foundational Skills & Intervention. 2 Credits.

Offered autumn. Prereq., enrolled in entry-level DPT program and passed all previous DPT courses or permission of instructor. Basic skills of transfers, bed mobility, gait assistive device use, and soft tissue mobilization. Level: Graduate

P T 527 - Physical & Electrophysical Agents. 3 Credits.

Offered spring. Prereq., enrolled in entry-level DPT program and passed all previous DPT courses or permission of instructor. Physiology, indications, contraindications, and application of electrotherapy and physical agents. Theory and application of electrodiagnostic and electrotherapeutic procedures. Level: Graduate

P T 529 - Clinical Biomechanics. 4 Credits.

Offered autumn. Prereq., enrolled in entry-level DPT program and passed all previous DPT courses or permission of instructor. Principles of biomechanics and application to physical therapy. Level: Graduate

P T 530 - Clinically Applied Exercise Physiology. 5 Credits.

Offered spring. Enrolled in entry-level DPT program and passed all previous DPT courses or permission of instructor. 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 531 - Prosthetics. 2 Credits.

Offered spring. Prereq. enrolled in entry-level DPT courses or consent of instructor. Information pertinent to pathology, examination, and evaluation of patients with amputations and conditions requiring prosthetics. The basic components of the course include types of devices, fitting, exercise programs, gait analysis and gait training. An overview of upper extremity prosthetics will be provided.

P T 532 - Foundational Skills II. 1 Credit.

Offered spring. Prereq., enrolled in entry-level DPT program and passed all previous DPT courses or consent of instructor. Principles of soft tissue mobilization. Techniques covered include: superficial, petrissage, kneading, neuromuscular, friction massage and trigger point techniques. Instruction regarding indications, precautions, contraindications, draping, position, and primacy issues included. Level: Graduate

P T 536 - Neurosciences. 5 Credits.

Offered spring. Prereq., enrolled in entry-level DPT program and passed all previous DPT courses or permission of instructor. 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. 1 Credit.

Offered spring. Prereq., enrolled in entry-level DPT program and passed all previous DPT courses or consent of instructor. Introduction to the clinical reasoning process in physical therapy, faculty research and scholarship options, and laboratory orientation. Level: Graduate

P T 563 - Cardiopulmonary PT. 4 Credits.

Offered autumn. Prereq., enrolled in entry-level DPT program and passed all previous DPT courses or consent of instructor. 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 - Pediatric Physical Therapy. 2 Credits.

Offered autumn. Prereq., enrolled in entry-level DPT program and passed all previous DPT courses or consent of instructor. Normal development throughout childhood. Physical therapy examination, evaluation and intervention of children with neuromotor and musculoskeletal dysfunction including physical therapy for children in school systems. Level: Graduate

P T 567 - Neurorehabilitation I. 3 Credits.

Offered autumn. Prereq., enrolled in entry-level DPT program and passed all previous DPT courses or consent of instructor. Neurologic physical therapy assessment and intervention of adults. Principles of neuroplasticity, motor control, motor learning and application to physical therapy neurorehabilitation. Includes wheelchair seating and mobility assessment and prescription. Level: Graduate

P T 568 - Neurorehab II. 3 Credits.

Offered spring. Prereq., enrolled in entry-level DPT program and passed all previous DPT courses or consent of instructor. Neurologic physical therapy assessment and intervention of adults. Principles of neuroplasticity, motor control, motor learning and application to physical therapy neurorehabilitation. Includes assessment and treatment of vestibular system and conditions. Level: Graduate

P T 569 - Musculoskeletal Management II. 6 Credits.

Offered autumn. Prereq., enrolled in entry-level DPT program and passed all previous DPT courses or consent of instructor. Principles of musculoskeletal examination, evaluation, and intervention for the hip, knee, ankle, foot, lumbar spine, obstetrics and pelvic floor. Level: Graduate

P T 570 - Psych of Illness & Disability. 2 Credits.

Offered autumn. Prereq., enrolled in entry-level DPT program and passed all previous courses or consent of instructor. Psychosocial response to illness and disability to include patient motivation and patient/professional interaction for persons with disability throughout the lifespan. Level: Graduate

P T 572 - Practice & Administration. 3 Credits.

Offered spring. Prereq., enrolled in entry-level DPT program and passed all previous DPT courses or consent of instructor. Practice management and operations explored with emphasis on strategic planning, human resource management, regulatory compliance/risk management, quality improvement and clinical coding and billing instruction. Level: Graduate

P T 573 - Musculoskeletal Management III. 6 Credits.

Offered spring. Prereq., enrolled in entry-level DPT program and passed all previous DPT courses or consent of instructor. 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. 2 Credits.

Offered autumn. Prereq., enrolled in entry-level DPT program and passed all previous DPT courses or consent of instructor. 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 it 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 582 - Clinical Clerkship. 1 Credit.

Offered spring. Prereq., enrolled in entry-level DPT program and passed all previous DPT courses or consent of instructor. 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 I. 2 Credits.

Offered spring. Prereq., enrolled in entry-level DPT program and passed all previous DPT courses or consent of instructor. An integrated, part-time clinical experience with emphasis on patient evaluation, treatment and professional development. Only CR/NCR grading. Level: Graduate

P T 584 - Integrated Clinical Experience II. 2 Credits.

Offered autumn. Prereq., enrolled in entry-level DPT program and passed all previous DPT courses or consent of instructor. An integrated, part-time clinical experience with emphasis on patient evaluation, treatment and professional development. CR/NCR grading. Level: Graduate

P T 587 - Full-TIme Clinical Experience I. 6 Credits.

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. Only CR/NCR grading.

P T 589 - Full-Time Clinical Experience II. 6 Credits.

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.

P T 626 - Clinical Medicine IV. 2 Credits.

Offered autumn. Prereqs., enrolled in entry-level DPT program and passed all previous DPT courses or consent of instructor. Course will focus on the role of the physical therapist in a Direct Access environment. Pathology, differential screening, pharmacotherapeutics, evaluation and management of gastrointestinal, endocrine/metabolic and hepatobiliary disease. Level: Graduate

P T 627 - Prevention & Wellness Education. 3 Credits.

Offered autumn. Prereqs., enrolled in entry-level DPT program and completion of all previous DPT courses or consent of instructor. Nutrition, health promotion, patient and support network education, exercise/fitness, disease and injury prevention, life span emphasis and adaptive sports. Level: Graduate

P T 628 - PT Student Clinic. 1 Credit.

Offered autumn and spring. Prereq., enrolled in entry-level DPT program and passed all previous DPT courses or consent of instructor. 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

P T 629 - Clinical Medicine V. 2 Credits.

Offered autumn. Prereqs., enrolled in entry-level DPT program and passed all previous DPT courses or consent of instructor. Course will focus on evaluation, differential screening, pharmacology, and management of integumentary disorders. Includes wound assessment and treatment. Level: Graduate.

P T 631 - Health Science Education Foundations I: Educational Theory and Methods. 3 Credits.

Offered autumn, spring. First in the four course series for the HSEL Certificate. This course highlights the history of health sciences professional education, exploring in particular the evolution of teaching/learning methodologies used in the health sciences to best engage student learners. Graduate: Level

P T 632 - Health Science Education Foundations II: Instructional Design. 3 Credits.

Offered autumn, spring. This course examines health science curriculum design, including discussion of development of mission, vision, philosophy and outcomes. Level: Graduate

P T 633 - Health Science Education Foundations III: Evaluation & Outcome Assessment. 3 Credits.

Offered autumn, spring. Online. This course examines the education evaluation process at several levels including student performance, and satisfaction, course/student/graduate outcomes, curriculum assessment and program outcomes. Level: Graduate

P T 634 - Health Science Education Foundations IV: Leadership Essentials to Transform Education. 3 Credits.

Offered autumn, spring. Online. This course fosters leadership development within the contemporary academic and clinical education environments, explores the unique characteristics of higher education and guides participants to become transformational leaders skilled to reframe health science education, guide educational practices and promote educational excellence. Level: Graduate

P T 635 - Health Science Education: Faculty Evaluation & Development. 2 Credits.

Offered autumn, spring. Online. This course examines in detail methods of faculty assessment beginning with hiring, development, assessment and supervision. Level: Graduate

P T 636 - Health Science Education: Leading Teams, the Art of Influencing Others. 2 Credits.

Offered autumn, spring. Online. This course explores how to form, manage and motivate teams with awareness of gender, generational and developmental considerations. Level: Graduate.

P T 641 - Introduction to Lifestyle Intervention Health. 2 Credits.

Offered autumn, spring. Prereq., must be enrolled in LIH certificate program. Introduces students to Lifestyle Intervention Health [LIH] programs and builds the context for physical-therapist led lifestyle intervention teams to include, exploring the public health context for LIH teams, identifying target patient populations, and presenting the core competencies required to participate in and lead LIH teams. Level: Graduate

P T 642 - Defining Framework for Measuring, Planning and Delivering Health-Focused Lifestyle Interventions. 2 Credits.

Offered autumn and spring. Prereq., must be Enrolled in LIH certificate program and P T 641 required. Introduces students to health belief and behavior models as well as a structured methodology for assessment of health status for individuals and at a community level. Level: Graduate

P T 643 - Principles of Interpersonal and Organizational Health Coaching. 2 Credits.

Offered autumn and spring. Prereq., must be enrolled in LIH certificate program and P T 641 and P T 642 required. Introduction to health coaching principles, motivational interviewing, and the influence of health belief and behavior models on developing individual and community level action plans. Level: Graduate

P T 644 - Competencies for LIH Teams. 2 Credits.

Offered autumn and spring. Prereq., must be enrolled in LIH certificate and P T 641, P T 642, and P T 643 required. Provides students with an overview of the knowledge, skills, and abilities in four specific content areas that are important for ensuring success of physical therapist led LIH teams. Level: Graduate

P T 645 - Developing a Lifestyle Intervention Health Business Plan. 2 Credits.

Offered autumn and spring. Prereq., must be enrolled in LIH certificate program and P T 641, P T 642, P T 643, and P T 644 required. Guides students through a structured process to develop an achievable strategic plan for a physical therapist-led LIH program or business. Level: Graduate

P T 649 - Lifestyle Intervention Health Capstone Experience. 2 Credits.

Offered spring and autumn. Prereq., must be enrolled in LIH certificate program and P T 641, P T 642, P T 643, P T 644, and P T 645 required. Provides students with an onsite capstone experience that is designed to provide students the opportunity to interact with faculty in a variety of classes, discussions and presentations. Students will also present their business plans to and receive feedback from faculty with significant LIH business experience. Level: Graduate

P T 650 - Screening for Medical Disorder. 2 Credits.

Offered autumn and 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 - Medical Imaging in Rehabilitation. 2 Credits.

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 Rehabilitation. 2 Credits.

Offered autumn, spring. Prereq., in a PT 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. 1 Credit.

Offered spring, summer. Prereq. Enrolled in a PT 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. 1 Credit.

Offered autumn, spring. Prereq. Enrolled in a PT 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. 2 Credits.

Offered spring, summer. Prereq. Enrolled in a PT curriculum. Enhance the PT clinical learners appreciation of business and management practices needed to succeed within the current healthcare landscape. Level: Graduate

P T 656 - Coding and Reimbursement. 1 Credit.

Offered autumn, summer. Prereq., enrolled in a PT curriculum. Educate the clinical learner in analyzing reimbursement of current billing, accounts receivable, collection procedures and use of proper coding. Not required for students completing the post-professional DPT program practicing outside the US. Level: Graduate

P T 657 - Professionalism. 2 Credits.

Prereq. Enrolled in a PT 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. 3 Credits.

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. 4 Credits.

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 - Management of Musculoskeletal Disorders. 2 Credits.

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 - Management of Cardiovascular or Pulmonary Disorders. 2 Credits.

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 - Management of Neuro Disorders. 2 Credits.

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 - Management of Integumentary Disorders. 2 Credits.

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 - Wellness and Health Promotion. 2 Credits.

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. 2 Credits.

Offered autumn. Data analysis, writing of research manuscript, presentation of project. Level: Graduate

P T 676 - Clinical Reasoning III. 3 Credits.

Offered autumn. Prereqs., enrolled in entry-level DPT program and passed all previous DPT courses or consent of instructor. 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.. 1-6 Credits.

(R-6) Offered autumn and spring. Prereqs., Enrolled in entry-level DPT program and passed all previous DPT courses or consent of instructor. 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. 11 Credits.

Prereq., enrolled in entry-level DPT program and passed all previous DPT courses or consent of instructor. 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. 1-10 Credits.

(R-10) Prereq., consent of instr. Traditional or CR/NCR grading as determined by instructor. Level: Graduate

P T 691 - Special Topics. 1-6 Credits.

(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. 1-4 Credits.

(R-6) Prereq., consent of instructor. Traditional or CR/NCR grading as determined by instructor. Level: Graduate

P T 694 - Seminar/Workshop. 1-6 Credits.

(R-6) Traditional or CR/NCR grading as determined by course instructor. Level: Graduate

P T 699 - Thesis/Dissertation. 1-10 Credits.

(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

Physics (PHSX) < University of Montana

Physics (PHSX)

PHSX 101 - Freshman Physics Experience. 1 Credit.

Offered autumn. 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 102 - Preparation for Physics. 2 Credits.

Intended primarily for students who wish to learn or review preparatory material to succeed in the algebra-based physics sequence. Basic physical quantities and their mathematical relationships will be explored along with development of problem solving skills. The course also includes selected mathematical topics, such as trigonometry and vectors that are essential for studying physics.

PHSX 141N - Einstein's Relativity. 3 Credits.

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.

Gen Ed Attributes: Natural Science Course (N)

PHSX 191 - Special Topics. 1-6 Credits.

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

PHSX 192 - Independent Study. 1-6 Credits.

PHSX 198 - Internship. 1-9 Credits.

(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.

PHSX 205N - College Physics I. 4 Credits.

Offered autumn and spring. Prereq., M 122 or M 151 or ALEKS >= 5 or M03-Maplesoft Calculus score >= 15, 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 215N/PHSX 218N and PHSX 205N/PHSX 208N.

Gen Ed Attributes: Natural Science Course (N)

PHSX 206N - College Physics I Laboratory. 1 Credit.

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 215N/PHSX 218N and PHSX 205N/PHSX 208N. Gen Ed Attributes: Natural Science Lab Course (N)

Gen Ed Attributes: Natural Science Course (N)

PHSX 207N - College Physics II. 4 Credits.

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 215N/PHSX 218N and PHSX 205N/PHSX 208N.

Gen Ed Attributes: Natural Science Course (N)

PHSX 208N - College Physics II Laboratory. 1 Credit.

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 215N/PHSX 218N and PHSX 205N/PHSX 208N. Gen Ed Attributes: Natural Science Lab Course (N)

Gen Ed Attributes: Natural Science Course (N)

PHSX 215N - Fund of Physics w/Calc I. 4 Credits.

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/PHSX 218N and PHSX 205N/PHSX 208N.

Gen Ed Attributes: Natural Science Course (N)

PHSX 216N - Physics Laboratory I w/Calc. 1 Credit.

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/PHSX 218N and PHSX 205N/PHSX 208N. Gen Ed Attributes: Natural Science Lab Course (N)

Gen Ed Attributes: Natural Science Course (N)

PHSX 217N - Fund of Physics w/Calc II. 4 Credits.

Offered spring. Prereq., PHSX 215N, and prereq. or coreq. PHSX 218N, 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/PHSX 218N and PHSX 205N/PHSX 208N.

Gen Ed Attributes: Natural Science Course (N)

PHSX 218N - Physics Laboratory II w/Calc. 1 Credit.

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/PHSX 218N and PHSX 205N/PHSX 208N. Gen Ed Attributes: Natural Science Lab Course (N)

Gen Ed Attributes: Natural Science Course (N)

PHSX 225N - Gen Science: Phys & Chem Sci. 5.000 Credits.

Offered autumn. Prereq., M 095 or ALEKS placement >= 4 or M02-Maplesoft Algebra score >= 12. 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. Gen Ed Attributes: Natural Science Lab Course (N)

Gen Ed Attributes: Natural Science Course (N)

PHSX 291 - Special Topics. 1-9 Credits.

(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. 1-9 Credits.

(R-9) Course material appropriate to the needs and objectives of the individual student.

PHSX 301 - Intro Theoretical Physics. 3 Credits.

Offered spring. Prereq., M 273 and Prereq., or coreq., PHSX 217N-218N or PHSX 207N - PHSX 208N. 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. 2 Credits.

Offered autumn. Prereq., PHSX 217N-PHSX 218N or PHSX 207N- PHSX 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. 3 Credits.

Offered spring. Prereq., or Coreq., PHSX 301. Topics in classical mechanics at the intermediate level, emphasizing Lagrangian and Hamiltonian dynamics.

PHSX 323 - Intermediate Physics Lab. 3 Credits.

Offered spring. Prereq., PHSX 217N- PHSX 218N or PHSX 207N- PHSX 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. 3 Credits.

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. 3 Credits.

Offered spring even-numbered years. Prereq., WRIT 101 or equivalent, one intermediate writing course, and PHSX 217N - PHSX 218N or PHSX 207N - PHSX 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.

Gen Ed Attributes: Writing Course-Advanced

PHSX 333 - Computational Physics. 3 Credits.

Offered spring odd-numbered years. Prereq., PHSX 217N-218N or PHSX 207N-208N; 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. 3 Credits.

Offered autumn. Prereq., PHSX 217N?PHSX 218N or PHSX 207N?PHSX 208N and prereq., or 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. 1-12 Credits.

(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. 1-6 Credits.

(R-6) Offered intermittently. Prereq., consent of instr. Independent research in topics of current interest in physics.

PHSX 423 - Electricity & Magnetism I. 3 Credits.

Offered autumn. Prereq, PHSX 301. Electricity and magnetism at the intermediate level.

PHSX 425 - Electricity & Magnetism II. 3 Credits.

Offered spring. Prereq., PHSX 423. Continuation of PHSX 423. Electricity and magnetism at the intermediate level.

PHSX 444 - Advanced Physics Lab. 3 Credits.

Offered autumn. Prereq., PHSX 461; PHSX 323 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. 3 Credits.

Offered spring even-numbered years. Prereq., PHSX 343; prereq., or coreq., M 221. Topics in thermodynamics and statistical mechanics.

PHSX 451 - Elementary Particle Physics. 3 Credits.

Offered alternate odd years. Prereq., PHSX 301 and PHSX 343. This course will provide a sound introduction to the Standard Model of particle physics introducing students to the fundamental particles, fundamental forces, and the Feynman calculus.

PHSX 456 - General Relativity. 3 Credits.

Offered periodically dependent upon faculty availability and student interest. Mountain Campus. Prereq., PHSX 141N or PHSX 343, M 221 or PHSX 301. An introduction to Einstein's gravity: the theory of general relativity. Students will be introduced to the concept of gravity as a manifestation of the curvature of spacetime. The course includes development of tensor calculus and the formulation of the Einstein equation with applications to black holes, gravitational lensing, cosmology, and gravitational waves.

PHSX 461 - Quantum Mechanics I. 3 Credits.

Offered autumn. Prereq., PHSX 311, PHSX 343; prereq. or coreq., M 311 or M 221. 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. 3 Credits.

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. 3 Credits.

(R-6) Offered intermittently. Prereq., PHSX 141N or PHSX 343, PHSX 301, or consent of instr. Studies of a topic in advanced modern physics. The topic chosen will vary according to instructor.

PHSX 492 - Independent Study. 1-9 Credits.

(R-9) Offered intermittently. University omnibus option for independent work.

PHSX 499 - Senior Capstone Seminar. 1 Credit.

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. 1-9 Credits.

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

PHSX 597 - Research. 1-6 Credits.

(R-9) Offered intermittently. Prereq., consent of instr. Research in selected physics topics. Level: Graduate

PHSX 598 - Internship. 1-9 Credits.

(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

PHSX 599 - Thesis. 1-9 Credits.

(R-9) Offered intermittently. Thesis preparation and execution. Level: Graduate

Political Science (PSCI) < University of Montana

Political Science (PSCI)

PSCI 151 - Intro to Civic Engagement. 2 Credits.

This course is an extensive service learning course that requires students to conduct at least 55 hours of volunteer work. Students participate in community needs analysis, organization analysis, and long term volunteer work.

PSCI 191 - Special Topics. 1-6 Credits.

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

PSCI 192 - Independent Study. 1-6 Credits.

(R-6) Offered intermittently. Course material appropriate to the needs and objectives of the individual student.

PSCI 210S - Intro to American Government. 3 Credits.

Offered autumn and spring. Constitutional principles, structures, and the political processes of the national government.

Gen Ed Attributes: Social Sciences Course (S), Democracy and Citizenship (Y)

PSCI 220S - Intro to Comparative Government. 3 Credits.

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.

Gen Ed Attributes: Social Sciences Course (S)

PSCI 227 - Global Health Issues. 3 Credits.

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 Relations. 3 Credits.

Offered autumn and spring. Review of the evolution of the nation-state system and survey of contemporary international actors, issues and forces for stability and change.

Gen Ed Attributes: Cultural Intl Diversity (X)

PSCI 250E - Intro to Political Theory. 3 Credits.

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.

Gen Ed Attributes: Ethical & Human Values Course

PSCI 311 - Rev & Reform Modern China. 3 Credits.

Offered intermittently. Prereq., junior standing or consent of instr. Survey of modern Chinese history 1799-present. Emphasizes institutional transformation of the state, social movements, and the imperial legacy. Blends social-scientific and historical approaches to China's periodic reforms and revolutions. Essential for further study of modern Chinese politics.

PSCI 320 - Exp Offering: Comp Politics. 1-6 Credits.

(R-6) Offered intermittently. Prereq., junior standing or consent of instr. Experimental or one-time offerings in the subfield of comparative politics.

PSCI 322 - Politics of Europe. 3 Credits.

Offered intermittently. 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.. 3 Credits.

Offered intermittently. Prereq., junior standing or consent of instr. Explores historic, current, and future greenhouse-gas emissions of the United States and China, reasons why both are the two largest C02 emitters, and prevailing national and subnational government policies and nongovernmental actions that affect emissions mitigation and adaptation.

PSCI 325 - Politics of Latin America. 3 Credits.

Offered intermittently. Prereq., junior standing or consent of instr. Latin American politics from both historical and contemporary perspectives.

PSCI 326 - Politics of Africa. 3 Credits.

Offered intermittently. Prereq., junior standing or consent of instr. Development of the political systems of Africa. Analysis of the interaction between African and Western social, political, and economic forces. Consideration of African political thought.

PSCI 327 - Politics of Mexico. 3 Credits.

Offered intermittently. 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. 3 Credits.

Offered intermitently. Prereq., junior standing or consent of instr. Institutions and political development in China.

PSCI 330 - Exp Offering: Intrnt Relations. 1-6 Credits.

(R-6) Offered intermittently. Prereq., junior standing or consent of instr. Experimental or one-time offerings in the subfield of international relations.

PSCI 332 - Global Environmental Pol.. 3 Credits.

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. 3 Credits.

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. 3 Credits.

Offered intermittently. 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. 3 Credits.

Offered spring intermittently. 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. 3 Credits.

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. 1-6 Credits.

(R-6) Offered intermittently. Prereq., junior standing or consent of instr.Experimental or one-time offerings in the subfield of American government.

PSCI 341 - Political Parties and Election. 3 Credits.

Offered intermittently. Prereq., PSCI 210S and junior standing or consent of instr. Political party organization, nominations, campaigns and elections in the United States.

PSCI 342 - Media, Public Opinion, Polling. 3 Credits.

Offered intermittently. Prereq., PSCI 210S and junior standing or consent of instr. Study of the role played by mass media in shaping public opinion, policy agendas, and governmental institutions.

PSCI 344 - State and Local Government. 3 Credits.

Offered intermittently. Prereq., PSCI 210S and junior standing or consent of instr. 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 345 - American Political System. 3 Credits.

Offered intermittently. Prereq., junior standing or consent of instr. This course explores the theoretical ideas that informed the founding of the American political system, how that system developed over time, and the contemporary challenges facing American democracy and its national institutions. We will focus our attention on federalism, Congress, the Presidency, the Judiciary, and political parties.

PSCI 346 - American Presidency. 3 Credits.

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 348 - US Multicultural Politics. 3 Credits.

Offered intermittently. Prereq., junior standing or consent of instr. 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 349 - Montana Government and Politics. 3 Credits.

Offered intermittently. Prereq., PSCI 210S. This course offers an overview of Montana politics and government, with a focus on the state?s political history, constitutional structure, political institutions, campaigns and elections, and

PSCI 350 - Exp Offering: Political Theory. 1-6 Credits.

(R-6) Offered intermittently. Prereq., junior standing or consent of instr. Experimental or one-time offerings in the subfield of political theory.

PSCI 352 - American Political Thought. 3 Credits.

Offered spring. Prereq., PSCI 250E or and junior standing 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. 3 Credits.

(R-6) Offered intermittently in autumn. Prereq., PSCI 250E and junior standing or consent of instr. and junior standing. Topics vary. 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. 3 Credits.

Offered autumn. Prereq., junior standing and consent of instr. 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.

PSCI 360 - Exp Offering: Public Admin. 1-6 Credits.

(R-6) Offered intermittently. Prereq., junior standing or consent of instr. Experimental or onetime offerings in the subfield of public administration or policy.

PSCI 361 - Public Administration. 3 Credits.

Offered intermittently. Prereq., PSCI 210S and junior standing or consent of instr. Legal and institutional setting of the administrative system; dynamics of organization and processes of public management.

PSCI 365 - Pub Policy Issues and Analysis. 3 Credits.

Offered intermittently. Prereq., junior standing or consent of instr. 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. 3 Credits.

Offered autumn. Prereq., PSCI 210S and junior standing. Introduction to American courts with emphasis on judicial policy making.

PSCI 381 - State Formation. 3 Credits.

Offered intermittently. Prereq., PSCI 220S and junior standing or consent of instr. This course examines the concept of the `state? and evaluates explanations for the emergence and proliferation of this form of organization throughout the world. Questions: what is the `state?? What is the relationship of the state to the rest of `society?? How has the state affected or altered human behavior and belief? What are the political-economic institutions most associated with the `state?? What is/has been the role of the state in promoting industrialization and economic development and how has the process of industrialization in turn affected the state?

PSCI 391 - Special Topics. 1-9 Credits.

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

PSCI 398 - Internship. 1-6 Credits.

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. Level: Undergraduate.

PSCI 400 - Adv Writing in Pol Science. 1 Credit.

(R-3) Offered autumn and spring. Prereq., WRIT 101 or equivalent, one intermediate writing course and junior standing or consent of instr. 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.

Gen Ed Attributes: Writing Course-Advanced

PSCI 420 - Exp Offering: Comp Politics. 1-9 Credits.

(R-9) Offered intermittently. Prereq., junior standing or consent of instr. Experimental or one-time offerings in the subfield of comparative politics.

PSCI 430 - Exp Offering: Intrnt Relations. 1-9 Credits.

(R-9) Offered intermittently. Prereq., junior standing or consent of instr. Experimental or one-time offerings in the subfield of international relations.

PSCI 431 - Politics of Global Migration. 3 Credits.

Offered intermittently. Prereq., junior standing or consent of instr. Explores of the elective and forced migration of peoples within countries and across national boundaries. Geographical coverage includes Asia, North America, Africa, and Europe. Attention to policy, development, health, and gender issues surrounding economic and political migration.

PSCI 433 - International Law & Org. 3 Credits.

Offered intermittently. 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. 1-9 Credits.

(R-9) Offered intermittently. Prereq., junior standing or consent of instr. Experimental or one-time offerings in the subfield of American government.

PSCI 442 - Environmental Policy. 3 Credits.

Offered intermitently. Prereq., PSCI 210S and junior standing or consent of instr. This course surveys environmental politics and policy, primarily in the United States. We examine the nature and scope of environmental, energy, and natural resource problems; contrasting perspectives on their severity and policy implications; the goals and strategies of the environmental community and its opponents; public opinion on the environment; scientific, economic, political, and institutional forces that shape policymaking and implementation; approaches to environmental policy analysis; and selected issues in environmental policy both within the U.S. and globally.

PSCI 443 - Politics of Social Movements. 3 Credits.

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. 3 Credits.

Offered intermittently. Prereq., PSCI 210S and junior standing or consent of instr. Examines 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. 3 Credits.

Offered intermittently. Prereq., junior standing or consent of instr. 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. 3 Credits.

Offered intermittently. Prereq., junior standing or consent of instr. 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 450 - Exp Offering: Political Theory. 1-9 Credits.

(R-9) Offered intermittently. Prereq., junior standing or consent of instr. Experimental or one-time offerings in the subfield of political theory.

PSCI 452 - Utopianism and its Critics. 3 Credits.

Offered intermittently. Prereq., junior standing or consent of instr. Examination of classic and contemporary utopias, from Plato's Republicto Barbara Goodwin's "Justice by Lottery" as well as their critics.

PSCI 453 - Modern Political Theory. 3 Credits.

Offered autumn. Prereq., PSCI 250E and junior standing 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 456 - Chinese Polit & Soc Thought. 3 Credits.

Offered intermittently. Prereq., junior standing or consent of instr. Chinese thought from the sixth century BCE to the present with specific attention to political philosophy and social criticism. Emphasis on changing Confucian tradition, encounter with Western thought, and understanding deep roots of contemporary discourse.

PSCI 460 - Exp Offering: Public Admin. 1-9 Credits.

(R-9) Offered intermittently. Prereq., junior standing or consent of instr. Experimental or onetime offerings in the subfield of public administration or policy.

PSCI 461 - Administrative Law. 3 Credits.

Offered intermittently. 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. 3 Credits.

Offered intermittently. Prereq., junior standing or consent of instr. 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. 3 Credits.

Offered autumn. Prereq., junior standing or consent of instr. Functions and processes of public administration in the Third World. Focus on alleviating poverty and underdevelopment. Includes project design and development planning activities.

PSCI 468 - . 3 Credits.

Offered intermittently. Prereq., Junior standing or consent of instr. 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. 3 Credits.

Offered intermittently spring. Prereq., junior standing or consent of instr. Focuses on the ethical challenges faced by public servants in government agencies.

PSCI 471 - American Constitutional Law. 3 Credits.

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. 3 Credits.

Offered intermittently. Prereq., PSCI 471 and junior standing 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. 3 Credits.

Offered autumn. Prereq., junior standing or consent of instr. 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 481 - Origins of Democracy and Authoritarianism. 3 Credits.

Offered intermittently. Prereq., PSCI 220S and junior standing or consent of instr.. This course examines the meaning of the terms "democracy" and "authoritarianism" in a way that permits measurement and analysis, then seeks to explain conditions under which such regimes or political systems emerge.

PSCI 482 - Politics of the World Economy. 3 Credits.

Offered intermittently. Prereq., PSCI 220S or PSCI 230X and junior standing or consent of instr. This course introduces concepts, tools, and problems in international and comparative political economy. In particular, it examines `economic? relations among `states? (these terms are in quotes because we will consider them in depth). Co-convened with PSCI 582.

PSCI 491 - Special Topics. 1-3 Credits.

(R-9) Offered intermittently.Prereq., junior standing or consent of instr. Experimental offerings of new courses, or one-time offerings of current topics.

PSCI 492 - Independent Study. 1-3 Credits.

(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. Level: Undergraduate.

PSCI 494 - Seminar. 1-6 Credits.

PSCI 498 - Intern/coop education/omnibus. 1-6 Credits.

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. Level: Undergraduate.

PSCI 520 - Comparative Government. 3 Credits.

Offered spring. Prereq., graduate standing or consent of instr. Concentrated reading and examination of selected subject areas in the field of comparative government. Level: Graduate

PSCI 521 - Globalization. 3 Credits.

Offered intermittently. 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 524 - Management and Policy Skills. 3 Credits.

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 530 - International Relations. 3 Credits.

Offered autumn. Concentrated reading and examination of selected subject areas in the field of international relations. Level: Graduate

PSCI 540 - American Government. 3 Credits.

Offered spring. Concentrated reading and examination of selected subject areas in the field of American government. Level: Graduate

PSCI 550 - Political Theory. 3 Credits.

Offered intermittently. Concentrated reading and examination of selected subject areas in the field of political theory. Level: Graduate

PSCI 553 - Modern Political Theory. 3 Credits.

Offered autumn. Covers political thinkers from the 16th c., beginning with Thomas Hobbes, to the early 20th century, ending with Marx. Graduate students will consider a fundamental question: what is the purpose of political inquiry? A fundamental question precisely because what people take to be the purpose of political theory determines what they study, who they study, and how they study it. Co-convening course with PSCI 453. Level: Graduate

PSCI 582 - Politics of the World Economy. 3 Credits.

Offered intermittently. This introduces concepts, tools, and problems in international and comparative political economy. In Particular, it examines 'economic? relations among `states? (the terms are in quotes because we will consider them in depth). Co-convened with PSCI 482.

PSCI 586 - MA Research Project. 1-4 Credits.

(R-6) Offered every term. Prereq., consent of instructor. Offered as Credit/No Credit only. Level: Graduate

PSCI 594 - Seminar. 1-9 Credits.

(R-9) Offered intermittently. Topic varies. Level: Graduate

PSCI 595 - Special Topics. 1-9 Credits.

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

PSCI 596 - Independent Study. 1-6 Credits.

(R-12) Offered every term. Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student. Level: Graduate

PSCI 597 - Applied Research Project. 1-4 Credits.

PSCI 598 - Internship. 1-6 Credits.

(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

PSCI 599 - Thesis. 1-6 Credits.

(R-6) Offered every term. Prereq., consent of instr. Preparation of a thesis or manuscript based on research for presentation and/or publication. Level: Graduate

Psychology (PSYX)

PSYX 100S - Intro to Psychology. 3 Credits.

Offered every term. Offered on Mountain Campus and at Missoula College. Introduction to the scientific study of behavior in humans and other animals. Credit not allowed for both PSY 100S and PSYC 100S.

Gen Ed Attributes: Social Sciences Course (S)

PSYX 105 - Careers in Psychology. 1 Credit.

Offered intermittently. Exploration of the various careers available in the general area of mental health research and practice.

PSYX 120 - Introduction to Psychological Research Methods. 3 Credits.

Offered every term. Prereq or Coreq., PSYX 100S. Experimental and other quantitative methods employed in the scientific study of behavior.

PSYX 161S - Fund of Organizational Psych. 3 Credits.

Offered intermittently. Offered at Missoula College. Foundation in the psychological processes that influence behavior of people in organizational settings.

Gen Ed Attributes: Social Sciences Course (S)

PSYX 191 - Special Topics. 1-6 Credits.

(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. 1-6 Credits.

(R-6) Offered intermittently. Course material appropriate to the needs and objectives of the individual student.

PSYX 222 - Psychological Statistics. 3.000 Credits.

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 230 - Developmental Psychology. 3 Credits.

Offered every term. Offered at Missoula College. 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 233 - Fund of Psychology of Aging. 3 Credits.

Offered intermittently. An overview of theories and research findings in the psychology of adulthood and aging.

PSYX 238 - Adolescent Psychology. 3 Credits.

Offered spring online. Offered at Missoula College. 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. 3 Credits.

Offered face-to-face in autumn and online in spring. Offered at Missoula College. 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.

PSYX 250N - Fund of Biological Psychology. 3 Credits.

Offered every term. Prereq., PSYX 100S. Introduction to the study of how psychological processes are supported by biological processes. Mechanisms across levels of analysis, from cells to individuals, are addressed.

Gen Ed Attributes: Natural Science Course (N)

PSYX 270 - Fund Psychology of Learning. 3 Credits.

Offered intermittently. Prereq., PSYX 100S. Basic theory and research on the nature of animal learning and behavior.

PSYX 280 - Fund of Memory and Cognition. 3 Credits.

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. 1-6 Credits.

(R-6) Offered every term. Prereq., consent of instr.

PSYX 291 - Special Topics. 1-6 Credits.

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

PSYX 292 - Independent Study. 1-6 Credits.

(R-6) Offered every term. Prereq., consent of instr.

PSYX 294 - Seminar/Workshop. 1 Credit.

(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. 1-6 Credits.

(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.

PSYX 320 - Advanced Psychological Research Methods. 3 Credits.

Offered every term. Prereq., WRIT 101 or equivalent, one intermediate writing course and PSYX 222. An appreciation of the experimental approach to the scientific study of behavior through student-conducted experiments.

Gen Ed Attributes: Writing Course-Advanced

PSYX 330 - Child Development. 3 Credits.

Offered every term. Prereq., PSYX 100S. The study of human biological, cognitive, and social-emotional development from the prenatal period through adolescence. Content covers major theories, research methods, and empirical findings fundamental to Developmental Psychology. Psychology, Communicative Sciences and Disorders, Social Work, Nursing, Education, and Health and Human Performance. 3 credits, repeatable.

PSYX 340 - Abnormal Psychology. 3 Credits.

Offered every term. Prereq., PSYX 100S. Gain a better understanding of, and appreciation for, variations in human behavior as well as major classifications of mental disorders and different diagnoses. This course explores the historical development of classification systems for behavior disorders and students will develop an understanding for the current diagnostic system, basic treatment approaches, and how to think critically about its strengths and limitations. Current controversies in the field of abnormal psychology will also be explored.

PSYX 345 - Child & Adolescent Psych Disorders. 3 Credits.

Offered intermittently. Prereq., PSYX 100S and 230/330. 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. 3 Credits.

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. 3 Credits.

Offered autumn. Prereq., PSYX 250N or PSYX 270. 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. 3 Credits.

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. 3 Credits.

Offered every term. Individual behavior as a function of interpersonal interaction.

PSYX 362 - Multicultural Psychology. 3 Credits.

Offered intermittenly. Current theories and research on culture, race, and ethnicity, and how the sociocultural context influences psychological processes.

PSYX 376 - Principles of Cognitive Behavioral Modification. 3 Credits.

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. 3 Credits.

Offered intermittenly. 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 Psychology. 3 Credits.

Offered intermittently. Prereq., PSYX 340. This course offers a closer look into clinical psychology as both a science and a profession and the integration of both. Learn what distinguishes clinical psychology from other mental health professions and understand the differences between treatment approaches and theoretical orientations. Students will learn basic aspects of professional roles and relationships in helping professions as well as practice relevant skills in thinking about, and discussing, clinical situations.

PSYX 382 - Forensic Psychology. 3 Credits.

Offered spring. Prereq., PSYX 100S. This course examines the many areas of forensic psychology, or the application of psychological concepts and theories to the legal system. This interface will be explored with an emphasis on empirical research findings from cognitive, social, experimental, and clinical psychology. Topics covered will include the variety of roles that psychologists play in the criminal justice system; the identification and evaluation of criminal suspects; the accuracy of eyewitness memory; the process of jury selection and decision-making; mental illness, competency to stand trial, and the insanity defense; criminal sentencing; and offender rehabilitation.

PSYX 383 - Health Psychology. 3 Credits.

Offered intermittently. 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. 3 Credits.

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. 1-3 Credits.

(R-3) Offered every term. Prereq., 12 credits in psychology including PSYX 290 and consent of instr.

PSYX 391 - Special Topics. 1-6 Credits.

(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. 1-3 Credits.

(R-3) Offered every term. Prereq., consent of instr.

PSYX 398 - Internship. 1-3 Credits.

(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.

PSYX 400 - History & System in Psychology. 3 Credits.

Offered intermittently. Prereq., WRIT 101 or equivalent, one intermediate writing course and 15 credits in psychology. Origin and development of basic concepts and methods in scientific psychology. Level: Undergraduate. Con-convenes with PSYX 500.

Gen Ed Attributes: Writing Course-Advanced

PSYX 406 - Rural Integrated Behavioral Health Care for Montana. 3 Credits.

Offered intermittently. Prereq., PSYX 383. This course presents an introduction to models and methods for providing behavioral and mental health services for rural communities in the context of medical Primary Care. It introduces the Patient Centered Medical Home model of primary medical care, provides practical introduction to behavioral health assessment and intervention techniques, and addresses how to make Integrated Behavioral Health training serve rural Montana service needs and workforce development.

PSYX 430 - Counseling Theories in Context

Offered autumn. Prereq., PSYX 100S. 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 442 - Counseling Theories in Context. 3 Credits.

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. 1-6 Credits.

(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. 1-6 Credits.

(R-6) Offered intermittently. Prereq., nine credits in psychology and consent of instr. Topics of current interest with critical examination of the literature.

PSYX 499 - Senior Thesis. 1-6 Credits.

(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 500 - Advanced History & Systems in Psychology. 3 Credits.

Offered intermittently. Prereq., 15 credits in psychology, graduate standing. Origin and development of basic concepts and methods in scientific psychology. Level: Gradaute. Con-convenes with PSYX 400.

PSYX 501 - Teaching of Psychology. 3 Credits.

Offered autumn. Prereq., graduate standing in psychology or consent of instr. Exploration and practice of effective teaching techniques. Level: Graduate

PSYX 511 - Professional Issues. 1 Credit.

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. 1-12 Credits.

(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 - Advanced Psychological Statistics I. 3 Credits.

Offered autumn. Prereq., undergraduate statistics, graduate standing in Psychology, or 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 - Advanced Psychological Statistics II. 4 Credits.

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. 3 Credits.

Offered autumn. Prereq., PSYX 520 and PSYX 521 and graduate standing in Psychology, or consent of instructor. 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. 3 Credits.

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. 3 Credits.

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. 3 Credits.

Offered autumn. Prereq., undergraduate statistics and graduate standing in clinical or school psychology. Introduction to the study of how psychological processes are supported by biological processes. Mechanisms across levels of analysis, from cells to individuals, are addressed. Individual tests of aptitudes and intellectual abilities; psychometric considerations in clinical assessment; objective personality assessment. Level: Graduate

PSYX 526 - Psychological Evaluation II: Objective Approaches and Applications. 3 Credits.

Offered spring. Prereq., graduate standing in clinical or school psychology. Objective methods in psychological assessment; psychological evaluation techniques in the clinical context. Level: Graduate

PSYX 530 - Clinical and Diagnostic Interviewing. 3 Credits.

Offered autumn. Prereq., graduate standing in clinical psychology, school psychology, or counseling, or consent of instructor. Microcounseling skills development through interactive practice and feedback. Level: Graduate

PSYX 531 - Principles of Psychological Intervention. 3 Credits.

Offered autumn. Prereq., graduate standing in clinical psychology or consent of instructor. 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. 3 Credits.

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. 1-4 Credits.

(R-24) Offered every term. Prereq., graduate standing in the clinical or school program. Theoretical and applied work in a supervised clinical setting. Level: Graduate

PSYX 535 - Child Interventions. 3 Credits.

(R-12) Offered spring. Prereq., graduate standing in the clinical or school psychology program. 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. 3 Credits.

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. 3 Credits.

Offered every other even year autumn semester. Prereq., graduation standing in clinical or school psychology or consent of instructor. Provides an intensive introduction to diagnostic, behavioral, and personality assessment of children and adolescents. Level: Graduate

PSYX 540 - Adv Development Psyc. 3 Credits.

Offered spring. 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. 1-6 Credits.

(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. 3 Credits.

Offered odd-numbered years spring semester. Prereq., consent of instr. Theory and experiment in the analysis of individual behavior in relation to social stimuli. Level: Graduate

PSYX 551 - Advanced Personality. 3 Credits.

Offered autumn odd-numbered years autumn semester. Prereq., graduate standing in psychology or consent of instr. Theory and research on human personality and behavior. Emphasis on issues and topics of historical and contemporary importance. Level: Graduate

PSYX 555 - Advanced Social and Developmental Psychology. 3 Credits.

Offered spring semester. Prereq., undergraduate course in developmental psychology or consent of instructor.This course provides graduate-level knowledge of the disciplines of Social Psychology and Developmental Psychology. Students will gain knowledge of Social Psychology research and theory relevant to how humans think about, influence, and are influenced by other people, as well as theories and research relevant to the field of Developmental Psychology, including major theories, methodologies, principles, and topics in across the lifespan. Level: Graduate

PSYX 560 - Advanced Learning & Cognition. 3 Credits.

Offered even-numbered years spring semester. 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. 3 Credits.

Offered odd-numbered years spring semester. 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. 3 Credits.

Offered even-numbered years autumn semester. Prereq., graduate standing in clinical, school, or experimental psychology or consent of instructor. Brain mechanisms and behavior; electrophysiological correlates of behavior. Level: Graduate

PSYX 580 - Professional School Psych. 3 Credits.

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. 3 Credits.

Offered autumn. Prereq., graduate standing in psychology or consent of instr. Covers Schoolwide Positive Behavior Supports in a three-tiered model. 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. 4 Credits.

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. 3 Credits.

(R-18) 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. 1-12 Credits.

(R-12) Offered autumn and spring. Prereq., graduate standing in school psychology program or consent of instr. Supervised work experience in the role and functions of school psychologists. Level: Graduate

PSYX 594 - Seminar. 1-12 Credits.

(R-12) Offered intermittently. A review and discussion of current research. Topics vary. Level: Graduate

PSYX 595 - Special Topics. 1-9 Credits.

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

PSYX 596 - Independent Study. 1-9 Credits.

(R-9) Offered autumn and spring Prereq., consent of instr. Assigned readings and other special study projects. Level: Graduate

PSYX 597 - Research. 1-9 Credits.

(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. 1-9 Credits.

(R-9) Offered autumn and spring. Prereq., consent of instr. M.A. thesis or M.A. Research project Level: Graduate

PSYX 604 - Psychological Intervention in Rural Integrated Behavioral Health. 3 Credits.

Offered intermittently. Prereq., graduate students in Clinical and School Psychology, Social Work, Counselor Education, and to local partners. This course presents an overview of and experience with the future of mental and behavioral health care delivery. It describes and discusses Integrated Behavioral Health (IBH) in Primary Care; introduces the Patient Centered Medical Home model of primary care; provides practical introduction to a variety of behavioral health approaches & techniques; and, it addresses explicitly how to make IBH training relevant to rural Montana and Montana workforce needs -- all through a mix of classroom and ?lab? experiences.

PSYX 625 - Clinical Assessment. 3 Credits.

Offered autumn. 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. 3 Credits.

Offered spring. Occasionally shifted to autumn. Prereq., enrollment in doctoral program in clinical, experimental, or school 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. 3 Credits.

(R-12) Offered every term. Prereq., graduate standing in the clinical or school psychology programs 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. 3 Credits.

(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. 1-4 Credits.

(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. 1-3 Credits.

(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 and Supervision. 3-4 Credits.

Offered spring even-numbered years. Prereq., graduate standing in school psychology. Theoretical background and case conceptualization in academic and behavioral consultation and supervision and how this can be applied in school-based settings. Level: Graduate

PSYX 694 - Seminar. 1-12 Credits.

(R-12) Offered intermittently. A review and discussion of current research. Topics vary. Level: Graduate

PSYX 697 - Advanced Research. 1-9 Credits.

(R-9) Offered autumn and spring. Prereq., consent of instr. Independent research projects, other than thesis or dissertation. Level: Graduate

PSYX 699 - Dissertation. 1-18 Credits.

(R-18) Offered every term. Prereq., consent of instr. Doctoral dissertation research activities. Level: Graduate

Public Health (PUBH) < University of Montana

Public Health (PUBH)

PUBH 510 - Intro to Epidemiology. 3 Credits.

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. 3 Credits.

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 515 - Public Health Genetics. 3 Credits.

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. 3 Credits.

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. 3 Credits.

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. 3 Credits.

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. 3 Credits.

Offered spring. Open to PUBH majors only. Prereq., PUBH 530 or consent of instr. This course deepens the students 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. 3 Credits.

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. 3 Credits.

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 545 - Issues in Maternal and Child Health. 3 Credits.

This course provides an overview of maternal and child health problems, programs, and policies. The course examines the social determinants of health and development of women, infants, children and adolescents using the life-course perspective. Students will become familiar with the epidemiology of maternal and childhood diseases and assess the resources and interventions used to combat them. 16 maximum enrollment. Offered online only. Level: Graduate

PUBH 548 - Issues in Mental &Child Health. 3 Credits.

Offered Summer. Prereq., Public Health majors. This course provides an overview of maternal and child health problems, programs, and policies. Using the life-course perspective, this course examines the social determinants of health and development of women, infants, children and adolescents. Students will become familiar with the epidemiology of maternal and childhood diseases and assess the resources and interventions used to combat them. Level: Graduate.

PUBH 550 - Progrm Eval & Res Meth. 3 Credits.

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. 3 Credits.

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. 3 Credits.

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. 3 Credits.

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 590 - Research. 3 Credits.

(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 591 - Special Topics/Experimental. 3 Credits.

(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 592 - Independent Study. 1-6 Credits.

(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 594 - Professional Paper. 3 Credits.

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

PUBH 595 - Practicum. 3 Credits.

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 600 - Research Rotations in Public Health. 3 Credits.

Offered autumn and spring. Prereq., open to PUBH majors only. This course will provide students with experience related to different types of public health research projects being conducted not only within the School of Public and Community Health Sciences, but throughout the University of Montana. Level: Graduate

PUBH 612 - Neuroepidemiology. 3 Credits.

Offered every even spring. Prereq., PUBH 510 or equiv. Students will learn about special considerations researchers incorporate into studying neurological diseases. Course materials will include a presentation of the pathophysiology, clinical aspects and descriptive epidemiology of a variety of neurologic diseases. Particular emphasis will be placed on the methodologic challenges and strategies associated with the study of these diseases. Level: Graduate

PUBH 613 - Spatial Epidemiology in Geographic Information Systems (GIS). 3 Credits.

Offered every odd spring. Prereq., PUBH 510 or equiv. Spatial epidemiology is the study of the spatial distribution of disease that encompasses both the description and analysis of geographic variations in disease with respect to any number of risk factors. Spatial Epidemiology in Geographic Information Systems (GIS) is a unique course designed for teaching GIS techniques to students interested in public health, epidemiology, and

infectious disease. It imbeds learning GIS software in the context of human health scenarios including wildlife (zoonotic) hosts and arthropod vectors. Students will gain basic skills in analyzing datasets and performing spatial and neighborhood analyses on data. Level: Graduate

PUBH 614 - Environmental and occupational epidemiology. 3 Credits.

Offered every odd spring. Prereq., PUBH 510 or equiv. Through readings, case studies, and class discussions, students will gain the ability to critically evaluate published research in environmental and occupational epidemiology that will provide the background for students to design and conduct their own research. A particular emphasis will be on published research relevant to rural communities to illustrate concepts; however, we also will draw from examples from around the world relating to a wide variety of exposures. Level: Graduate

PUBH 620 - Advanced Quantiative Methods in Public Health I. 3 Credits.

Offered autumn. Prereq., PUBH 510 and PUBH 520 or equiv. Through lectures and collaborative problem sets, students will gain the expertise to design and conduct their own research. The emphasis will be on concepts related to basic and advanced epidemiologic methods and on how these concepts influence study design choices. We will utilize R and STATA statistical software throughout the course to illustrate concepts using simple datasets. Level: Graduate

PUBH 621 - Adv Quant Methods II. 3 Credits.

Offered spring. Prereq., PUBH 620. This is the second in the Advanced Quantitative Methods series in public health. This semester will focus on practical data analysis and the presentation and translation of findings in both manuscript and oral form. We will analyze a complex, longitudinal dataset to illustrate the concepts learned in the first semester. The course will culminate in the analysis of a new longitudinal dataset and the presentation of your results. Level: Graduate

PUBH 640 - Qualitative Research Methods in Public Health. 3 Credits.

Offered every odd spring. Prereq., PUBH 540 or equiv. The course provides an overview of qualitative research methods commonly used in public health research. Students will develop expertise in designing and conducting: focus groups, interviews, conversation analysis, and analyses of digital data sources. The major deliverables in this class include developing a presentation on one of the qualitative research approaches, designing and implementing a qualitative research project, and writing a manuscript that summarizes the qualitative research project. Level: Graduate

PUBH 690 - Research. 1-9 Credits.

(R-9) 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.

PUBH 691 - Special Topics. 1-6 Credits.

Students will learn about special considerations researchers incorporate into studying neurological diseases. Course materials will include a presentation of the pathophysiology, clinical aspects and descriptive epidemiology of a variety of neurologic diseases. Particular emphasis will be placed on the methodologic challenges and strategies associated with the study of these diseases.

PUBH 692 - Independent Study. 1-6 Credits.

Supervised readings, research, or public health practice.

PUBH 694 - Seminar. 1-3 Credits.

(R-9) Students discuss experiences with goal of integrating theory and practice.

PUBH 699 - Dissertation. 1-9 Credits.

R-50. Offered every semester. The dissertation is an original contribution to knowledge of such substance and literary quality as to warrant publication. A dissertation research proposal that is approved by the student's PhD Advisory Committee must be completed before registering for Dissertation Research credit. Level: Graduate

Radiologic Technology (AHXR)

AHXR 100 - Intro to Diagnostic Imaging. 2 Credits.

Offered autumn. Offered at Missoula College. All program prereqs must be completed and must be accepted into program. Introduction to the field of radiology and its mix of technical equipment, lab work, hospital environment, and team work.

AHXR 101 - Patient Care in Radiology. 2 Credits.

Offered autumn. Offered at Missoula College. All program pre-requisites must be completed, and student must be accepted into the program. Introduction to the concepts and practices necessary to provide quality patient care in the diagnostic imaging department. Course covers legal and ethical standards of care, basic nursing practices, infection control, venipuncture, and etc, as well as medications and contrast agents used in radiology.

AHXR 121 - Radiographic Imaging I. 3 Credits.

Offered autumn. Offered at Missoula College. All program pre-requisites must be completed, and student must be accepted into the program. Introduction to physics of x-ray production. Includes factors of image quality and exposure methods: density, contrast, recorded detail, distortion.

AHXR 140 - Radiographic Methods. 3 Credits.

Offered autumn. Offered at Missoula College. All program pre-requisites must be completed, and student must be accepted into the program. Knowledge and skills necessary for quality patient care during standard and specialty radiographic procedures.

AHXR 141 - Radiology Lab. 1 Credit.

Offered at Missoula College. All program pre-requisites must be completed, and student must be accepted into the program. Students will practice all patient positioning skills necessary for competency as Radiologic Technologists.

AHXR 160 - Radiographic Methods II. 3 Credits.

Offered spring. Offered at Missoula College. Advanced and less common radiographic procedures are introduced including fluoroscopy, surgery and various other procedures

AHXR 161 - Radiographic Methods II Lab. 1 Credit.

Offered spring. Offered at Missoula College. Students will practice patient positioning skills necessary for competency as Radiologic Technologists.

AHXR 192 - Independent Study. 1-6 Credits.

Offered at Missoula College. Course material appropriate to the needs and objectives of the individual student.

AHXR 195 - Radiographic Clinical: I. 1-15 Credits.

(R-20) Offered over two semesters throughout the Radiology Technology program, beginning autumn semester. Offered at Missoula College. 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.

AHXR 221 - Radiographic Imaging II. 3 Credits.

Offered spring. Offered at Missoula College. 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. 2 Credits.

Offered spring. Offered at Missoula College. Principles of radiation protection and radiobiology. Topics include the effects of ionizing radiation on body tissues, protective measures for limiting exposure to the patient and personnel, and radiation monitoring devices.

AHXR 240 - Pathology and Image Analysis. 2 Credits.

Offered summer. Offered at Missoula College. Study of common pathologies encountered in radiology, and how pathologies are demonstrated on radiographic images. Introduces skills needed to evaluate and correct radiographic images.

AHXR 270 - Radiographic Registry Review. 2 Credits.

Offered autumn. Offered at Missoula College. 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.

AHXR 274 - Cross Sectional Anatomy. 3 Credits.

Course offered online spring semester. Offered at Missoula College. Students must be program graduates or ARRT certified with a current state license to register for the CT courses. This course will cover sectional anatomy (axial, sagittal and coronal planes), contrast media (types, contraindications, administration), imaging processes (scout acquisition and methods, parameter selection, protocol modification), and special

procedures (reformatting, 3-D rendering, biopsies/drains, screening).

AHXR 275 - Physics and Instrumentation. 2 Credits.

Course offered online spring semester. Offered at Missoula College. Students must be program graduates or ARRT certified with a current state license to register for the CT courses. This course will cover information specific to ARRT guidelines in preparation for the Computed Tomography Exam. The course will be broken down in to the following sections: patient assessment and preparation, contrast administration, radiation safety, and dosimetry.

AHXR 291 - Special Topics. 1-6 Credits.

(R-6) Offered at Missoula College. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

AHXR 295 - Radiographic Clinical: II. 8-24 Credits.

(R-20) Offered over two semesters throughout the Radiology Technology program, beginning summer semester. Offered at Missoula College. 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.

AHXR 298 - Internship. 1 Credit.

Offered at Missoula College. Extended classroom experience which provides practical application of classroom learning during placements off campus.

Religious Studies (RLST) < University of Montana

Religious Studies (RLST)

RLST 104 - Introduction to the Bible. 3 Credits.

This course offers an introduction to the modern study of the Bible, including both the Hebrew Bible (Old Testament) and the New Testament. It assumes no prior knowledge of religion, the Bible, Judaism or Christianity. The goal of the course is to understand the Bible?s literary structures and themes and its ancient historical contexts. It will approach the Bible from comparative, historical, literary, anthropological and archeological perspectives to illuminate the world of its authors.

RLST 191 - Special Topics. 1-9 Credits.

(R-9) Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

RLST 198 - Internship. 1-6 Credits.

(R-6) 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.

RLST 204H - Intro to the Hebrew Bible. 3 Credits.

An introduction to the history, religion, and literature of ancient Israel and to modern methods in Hebrew Bible (Old Testament) studies. Includes an introduction to the history and religions of ancient West Asia.

Gen Ed Attributes: Historical Studies

RLST 205L - Introduction to New Testament. 3 Credits.

An introduction to the history, religion, and literature of earliest Christianity and to modern methods in New Testament studies. Includes an introduction to the history and religions of the ancient Mediteranean.

Gen Ed Attributes: Lit & Artistic Studies (L)

RLST 225L - Christianity. 3 Credits.

Introduction to the historical development of Christian thought and practice in the cultures of late antiquity and the medieval and modern periods.

Gen Ed Attributes: Lit & Artistic Studies (L)

RLST 232H - Buddhism. 3 Credits.

A historical introduction to the development of Buddhist thought and practice in the cultures of Asia and the West.

Gen Ed Attributes: Historical Studies, Cultural Intl Diversity (X)

RLST 234X - Hindu Religious Traditions. 3 Credits.

Same as SSEA 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.

Gen Ed Attributes: Historical Studies, Cultural Intl Diversity (X)

RLST 238X - Japanese Religions. 3 Credits.

Offered at least once every two years. An introductory exploration of Japan's unique religious synthesis of Buddhist, Shinto, Taoist, Confucian and folk/shamanistic traditions.

Gen Ed Attributes: Historical Studies, Cultural Intl Diversity (X)

RLST 281E - Comparative Ethics. 3 Credits.

An examination of central theological teachings and modes of ethical reasoning of major religious traditions with models from the East and West.

Gen Ed Attributes: Ethical & Human Values Course

RLST 291 - Special Topics. 1-9 Credits.

(R-9) Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

RLST 292 - Independent Study. 1-6 Credits.

(R-6) Course material appropriate to the needs and objectives of the individual student.

RLST 300 - Theory & Method Study of Relig. 3 Credits.

A survey of modern theories and methods in the study of religion. Overview of sociological, anthropological, psychological, phenomenological, comparative, cognitive, and other approaches to the question, What is religion?

RLST 310 - Topics in Biblical Studies. 3 Credits.

(R-6) Selected topics in modern Hebrew Bible (Old Testament) and New Testament studies. Focus on history, literature, and religions of ancient West Asia, the Mediterranean and North Africa. Topics vary from year to year and include: Israelite religion; prophets and prophecy; biblical history and historiography; ancient Gospels; the letters and communities of Paul; early biblical interpretation; archaeology and iconography of ancient religions; religion and politics in the Bible.

RLST 320 - Anct Judaism & Early Christnty. 3 Credits.

(R6) Survey of the history and literature of ancient Judaism and early Christianity. Topics include: the emergence of Judaism and Christianity in the Persian, Greek, and Roman empires; religions of ancient West Asia and the Mediterranean; stories of Jewish and Christian origins; the historical Jesus; the early rabbinic movement; the Dead Sea Scrolls; Paul between Judaism and Christianity.

RLST 335 - Western Religious Thought I. 3 Credits.

Selected studies in the intellectual history of western religions, alternating between studies of periods and seminal thinkers. Emphasis will be on the ancient and medieval periods.

RLST 336 - Western Religious Thought II. 3 Credits.

Selected studies in the intellectual history of western religions, alternating between studies of periods and seminal thinkers. Emphasis will be on the late medieval and early modern periods.

RLST 353 - Topics in South Asia Religions. 3 Credits.

(R-6) This course will examine select topics of central importance with respect to the history of interaction between the major religions (Hinduism, Islam, Buddhism, Jainism, Sikhism) of South Asia.

RLST 354 - Topics in East Asia Religions. 3 Credits.

(R-6) This course will examine select topics of central importance with respect to the history of interaction between the major religions (Confucianism, Taoism, Buddhism, and folk animism and shamanism) of East Asia.

RLST 366 - Tibetan Civilization. 3 Credits.

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, but these will be explored within the context of the society's political, social, economic, and other cultural developments.

RLST 368 - Contemporary Buddhism in S/SEAsia. 3 Credits.

As with 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 in some of the major ways in which religions have confronted modernity.

RLST 369 - Contemplative Traditions of Asia. 3 Credits.

An exploration of the rich and diverse approaches to mental transformation and cultivation of gnosis as developed by several of Asia's major religious traditions, such as Buddhism, Jainism, Hinduism, Taoism, and Confucianism.

RLST 370 - Mysticism. 3 Credits.

(R-6) An inquiry into the literature and interpretation of mysticism in the major religious traditions. Each offering will focus on a specific tradition or period.

RLST 376 - Contemporary Religious Thought. 3 Credits.

(R-6) Study of selected major critical and constructive proposals in modern religious thought in various traditions.

RLST 391 - Special Topics. 1-12 Credits.

(R-12) Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

RLST 392 - Independent Study. 1-6 Credits.

(R-6) Course material appropriate to the needs and objectives of the individual student.

RLST 491 - Special Topics. 1-12 Credits.

(R-12) Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

RLST 492 - Independent Study. 1-9 Credits.

(R-9) Prereq., consent of instr. Work on selected problems by individual students under direct faculty supervision.

Russian (RUSS) < University of Montana

Russian (RUSS)

RUSS 101 - Elementary Russian I. 4 Credits.

Offered autumn. Emphasis on oral communication, with development in all major skill areas: listening, speaking, reading, and writing.

RUSS 102 - Elementary Russian II. 4 Credits.

Offered spring. Prereq., RUSS 101 or equiv. Continuation of 101.

Gen Ed Attributes: Foreign Language Requirement

RUSS 105H - Intro to Russian Culture. 3 Credits.

Offered autumn. Fulfills both the Historical and Cultural (H) and American and European (Y) General Education Perspectives. A chronological survey of Russian culture from its beginnings to the contemporary period.

Gen Ed Attributes: Historical Studies, Democracy and Citizenship (Y)

RUSS 191 - Special Topics. 1-6 Credits.

(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. 1-6 Credits.

(R?6) Offered intermittently. Course material appropriate to the needs and objectives of the individual student.

RUSS 193 - Study tours / Study abroad. 1-12 Credits.

(R-10) Offered intermittently. University omnibus option for independent work.

RUSS 201 - Intermediate Russian I. 4 Credits.

Offered autumn. Prereq., RUSS 102 or equiv. Continuation of active skills approach to Russian listening, speaking, reading, and writing.

Gen Ed Attributes: Foreign Language Requirement

RUSS 202 - Intermediate Russian II. 4 Credits.

Offered spring. Prereq., RUSS 201. Continuation of 201. Continuation of active skills approach to Russian listening, speaking, reading, and writing.

Gen Ed Attributes: Foreign Language Requirement

RUSS 292 - Independent Study. 1-6 Credits.

(R-6) Offered autumn and spring. Course material appropriate to the needs and objectives of the individual student.

RUSS 293 - Study tours / Study abroad. 1-12 Credits.

(R-10) Offered intermittently. University omnibus option for independent work.

RUSS 301 - Russian: Oral & Written Expr I. 3 Credits.

Offered autumn. Prereq., RUSS 202 or consent of instr. Emphasis on active use of Russian. Intensive practice in conversation and writing.

Gen Ed Attributes: Foreign Language Requirement

RUSS 302 - Russian: Oral and Writen Expr II. 3 Credits.

Prereq., RUSS 301 or consent of instr. A continued emphasis on active use of Russian. Intensive practice in conversation and writing. Continuation of 301.

Gen Ed Attributes: Foreign Language Requirement

RUSS 306L - Evil and the Supernatural in Russian Literature. 3 Credits.

Offered alternate years. A survey of 19th-and 20th century Russian literature in translation. This course will focus on texts exploring evil and the supernatural. May include the works of Pushkin, Gogol, Dostoevsky, Tolstoy, Chekhov, Bulgakov and others. No knowledge of Russian is necessary.

Gen Ed Attributes: Lit & Artistic Studies (L)

RUSS 307L - Beauty, Power and Pride in Russian Literature. 3 Credits.

Offered alternate years. Survey of Russian literature up to the present day. Texts focus on the themes of beauty, power and pride as a lens for exploring elements of Russian identity.

Gen Ed Attributes: Lit & Artistic Studies (L)

RUSS 371 - SRAS: The New Great Game. 3 Credits.

Offered every term. Prereq., consent of instructor. 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.

RUSS 372 - SRAS: Understnding Cent Asia. 3 Credits.

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. 1-9 Credits.

(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. 1-6 Credits.

(R?6) Offered autumn and spring. Course material appropriate to the needs and objectives of the individual student.

RUSS 393 - Study tours / Study abroad. 1-12 Credits.

Offered intermittently. University omnibus option for independent work.

RUSS 398 - Internship. 1-6 Credits.

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.

RUSS 411 - 19th-Century Russian Authors. 3 Credits.

Offered intermittently. Prereq., RUSS 202 or consent of instructor. A study of various authors; may include Pushkin, Dostoevsky, Tolstoy, etc.

RUSS 412 - 20th-Century Russian Authors. 3 Credits.

Offered intermittently. Prereq., RUSS 202 or consent of instructor. A study of various authors; may include Bulgakov, Nabokov, Solzhenitsyn, etc.

RUSS 424 - Russian Short Story. 3 Credits.

Offered intermittently. Prereq., RUSS 202 or consent of instructor. A chronological study of the Russian short story, 19th and 20th centuries.

RUSS 440 - Russian Poetry. 3 Credits.

Offered intermittently. Prereq., RUSS 202 or consent of instructor. The evolution of Russian poetry from the end of the 18th century to the contemporary period.

RUSS 491 - Special Topics. 1-6 Credits.

(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. 1-6 Credits.

(R?6) Offered autumn and spring. Course material appropriate to the needs and objectives of the individual student.

RUSS 493 - Study tours / Study abroad. 1-12 Credits.

(R-10) Offered intermittently. University omnibus option for independent work.

RUSS 494 - Seminar in Russian Studies. 1-3 Credits.

(R?9) Offered intermittently. Prereq., WRIT 101 or equivalent, and one intermediate writing course and consent of instructor. 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. Topics announced in class schedules.

Gen Ed Attributes: Writing Course-Advanced

RUSS 594 - Seminar. 1-3 Credits.

RUSS 596 - Independent Study. 1-6 Credits.

(R?6) Offered intermittently.

Science (SCN) < University of Montana

Science (SCN)

SCN 105N - Montana Ecosystems. 3.000 Credits.

Offered autumn and spring. Offered at Missoula College. 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. Gen Ed Attributes: Natural Science Lab Course (N)

Gen Ed Attributes: Natural Science Course (N)

SCN 175N - Integrated Physical Science I. 3 Credits.

Offered every term. Offered at Missoula College. 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.

Gen Ed Attributes: Natural Science Course (N)

SCN 176N - Integrated Phys. Science II. 3 Credits.

Offered spring term intermittently. Offered at Missoula College. An introduction to the fundamental principles of environmental and earth sciences. Course emphasizes the scientific method and process of science.

Gen Ed Attributes: Natural Science Course (N)

SCN 260N - The Biology of Behavior. 3 Credits.

Offered autumn and spring. Offered at Missoula College. 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. Gen Ed Attributes: Natural Science Lab Course (N)

Gen Ed Attributes: Natural Science Course (N)

Social Work (S W)

S W 100 - Intro Soc Welfare. 3 Credits.

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. 1-3 Credits.

(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.

S W 200 - Intro Soc Wrk Pract. 3 Credits.

Offered autumn and spring. Prereq., S W 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. 1-6 Credits.

(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. 3 Credits.

Offered autumn and spring. Prereq., on introductory writing course, one intermediate writing course, S W 200, junior standing in Social Work and consent of instructor. 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.

Gen Ed Attributes: Writing Course-Advanced

S W 310 - S W Policy & Services. 3 Credits.

Offered autumn and spring. Prereq., S W 300. Social welfare history, program planning and analysis with review of selected policies on the national level. Includes international comparisons. Upper-division writing course.

S W 323 - Women & Soc Action Amer. 3 Credits.

Offered intermittently. Prereq., one of S W 100, SOCI 101S, or ANTY 101H or consent of instr. Focus on womens 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 womens experiences.

S W 350 - S W Interven Meth I. 3 Credits.

Offered autumn and spring. Prereq., S W 200 and consent of instructor. 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. 3 Credits.

Offered autumn and spring. Prereq., S W 300 and S W 350.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. 1-12 Credits.

(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. 1-3 Credits.

(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 the Center for Work-Based Learning. A maximum of 6 credits of Internship (198, 398) may count toward graduation.

S W 400 - Social Work Research. 3 Credits.

Offered autumn and spring. Prereq., S W 350. 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. 3 Credits.

Offered autumn and spring. Prereq., S W 350. 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.

Gen Ed Attributes: Ethical & Human Values Course

S W 419 - Adverse Childhood Development. 1 Credit.

Offered autumn. Prereq., admission to the program or consent of instructor. This is an online one credit course that is required for students enrolled in the Child Welfare Certificate Program. The course provides students with knowledge of how such socially adverse experiences as substance abuse, poverty, discrimination, and family violence can impact cognitive, emotional, and psycho-social development. Students will learn how these environmental stressors can negatively impact childrens academic achievement, health, mental health, and social functioning. Level: Undergraduate and Graduate

S W 420 - Child Abuse/Child Welfare. 3 Credits.

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 421 - Interventions with High-risk Families. 1 Credit.

Offered spring. Prereq., admission to the program and consent of instructor. This is an online one credit course that is required for students enrolled in the Child Welfare Certificate Program. The course provides students with knowledge about the effects of significant life events (substance abuse, violence, death) on families and how to develop effective strength-based practice skills to assess parents and/caregivers abilities to provide care and to participate in treatment planning.

S W 423 - Addiction Studies. 3 Credits.

Offered spring. 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 450 - Children and Youth at Risk. 3 Credits.

Offered autumn or spring. Focus on the aspects of society that pose a threat to todays 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 452 - Systems of Care. 1 Credit.

Offered autumn. Prereq., admission to certificate program or consent of instructor. This is an online one credit course that is required for students enrolled in the Child Welfare Certificate Program. The course provides students with knowledge of the social service, juvenile justice, mental health, health, and education systems and their role in promoting success among high-risk children and youth.

S W 455 - Social Gerontology. 3 Credits.

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 463 - Soc Justice in Indian Country. 2 Credits.

Offered autumn. This provides the senior undergraduate/graduate student with an overview of the history and context of the social and political issues impacting tribal communities. This course also provides an opportunity for students to become familiar with the strengths, values, and cultural paradigms of North American tribes while also providing the foundation for understanding the health, education, and environmental disparities of AI/AN people.

S W 464 - Cultural Humility in Social Work Practice: Valuing Diversity. 3 Credits.

Prereq., S W 300. A required diversity course specific to social work to be offered once or twice per year, depending on need; delivery method will vary to meet student needs.

S W 465 - Social Work Global Context. 3 Credits.

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. 3 Credits.

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. 3 Credits.

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 487 - Advanced Practice I. 2 Credits.

Offered every term. Prereq., S W 350 and Coreq., S W 495 and 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. 2 Credits.

Prereq., S W 350 and Coreq., S W 495 and admission to the practicum program. Consideration and discussion of practicum-related matters, professional development, and issues confronting the profession.

S W 491 - Special Topics. 1-9 Credits.

(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. 1-10 Credits.

(R-10) Offered intermittently. Prereq., 10 credits in social work. Independent work under the University omnibus option. See index.

S W 495 - Field Work Practicum. 5 Credits.

(R-10) Offered every term. Prereq., S W 350 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 S W 100, S W 200, S W 300, S W 350 and S W 360 and a 3.0 grade average for S W 200, S W 350 and S W 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.

S W 500 - Orientation. 1 Credit.

Prereq., admission to M.S.W. program. Seminar introducing M.S.W. students to program philosophy and social works theory and value base. Level: Graduate

S W 505 - Found Social Work Pract. 2 Credits.

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. 3 Credits.

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. 3 Credits.

Prereq., admission to M.S.W. program and S W 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. 3 Credits.

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. 3 Credits.

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. 3 Credits.

Prereq., S W 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. 4 Credits.

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. 3 Credits.

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. 3 Credits.

Prereq., S W 530. Focus on the analysis of existing or proposed policies specific to oppressed populations, rural areas and isolated communities. Level: Graduate

S W 532 - Indian Child Welfare Act. 1 Credit.

Prereq., Prerequisites include admission into the MSW program. This course will provide students with an understanding of the Indian Child Welfare Act including the historical events leading to its passage and contemporary issues surrounding implementation of the law. Students will apply knowledge of the law to practice and build skills on working across cultural differences in order to promote the best interest of American Indian children and families.

S W 535 - Advanced Practice. 4 Credits.

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. 3 Credits.

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. 3 Credits.

Offered spring. Prereq., admission to the MSW program, S W 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. 3 Credits.

Prereq., admission to the MSW program, S W 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. 3 Credits.

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 576 - Found Integrative Sem I. 1 Credit.

Prereq., admission to MSW program. 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. 1 Credit.

Prereq., admission to MSW program, S W 505, S W 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. 1 Credit.

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. 1 Credit.

Prereq., S W 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. 2 Credits.

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. 2 Credits.

Prereq., admission to MSW program, S W 505, S W 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. 3 Credits.

Prereq., S W 587, S W 589. Advanced supervised field work in public and private agencies and institutions. Level: Graduate

S W 589 - Concentration Practicum II. 3 Credits.

Prereq., S W 588. Advanced supervised field work in public and private agencies and institutions. Level: Graduate

S W 593 - Professional Portfolio. 1 Credit.

Prereq., foundation courses. Summative and in-depth written analysis of course work and practicum experience. Level: Graduate

S W 594 - Graduate Seminar. 3 Credits.

(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. 1-9 Credits.

(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. 1-9 Credits.

(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. 1-9 Credits.

(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

Sociology (SOCI)

SOCI 101S - Introduction to Sociology. 3 Credits.

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.

Gen Ed Attributes: Social Sciences Course (S)

SOCI 130S - Soc of Alternative Religions. 3 Credits.

Offered spring. Unconventional religious groups in American society. Topics include recruitment, conversion, commitment, defection, leadership, belief systems, organizational structure and change.

Gen Ed Attributes: Social Sciences Course (S)

SOCI 191 - Special Topics. 1-6 Credits.

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

SOCI 202 - Social Statistics. 3.000 Credits.

Offered every term. Prereq., 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. 3 Credits.

Offered autumn. 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.

Gen Ed Attributes: Social Sciences Course (S)

SOCI 212S - Social Issues Southeast Asia. 3 Credits.

Offered every other year. Introduction to the cultures, societies, and contemporary social problems of Southeast Asia.

Gen Ed Attributes: Social Sciences Course (S)

SOCI 220S - Race, Gender & Class. 3 Credits.

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.

Gen Ed Attributes: Social Sciences Course (S), Democracy and Citizenship (Y)

SOCI 221 - Criminal Justice System. 3 Credits.

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 260S - Introduction to Juvenile Delinquency. 3 Credits.

Offered spring. 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.

Gen Ed Attributes: Social Sciences Course (S)

SOCI 270 - Intro Development Sociology. 3 Credits.

Offered autumn. Introduction to sociological perspectives on international development, globalization, and sustainability. Rural and environmental issues emphasized.

SOCI 275S - Gender and Society. 3 Credits.

Offered spring. Exploration of the social construction of gender, especially in western, post-industrial societies such as the U.S.; gender ideologies affect the social definition and position of gendered individuals in work, family, sexual relationships, gendered divisions of labor, and social movements.

Gen Ed Attributes: Social Sciences Course (S)

SOCI 291 - Special Topics. 1-6 Credits.

(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. 3 Credits.

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. 3 Credits.

Offered spring odd-numbered years. Prereq., SOCI 101S, SOCI 221 and either SOCI 211S or SOCI 260S. 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 318 - Sociological Research Methods. 3 Credits.

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. 3 Credits.

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 332 - Sociology of the Family. 3 Credits.

Offered autumn. Prereq., SOCI 101S. 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. 3 Credits.

Offered autumn. Prereq., SOCI 101S and SOCI 211S or SOCI 260S. 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 345 - Sociology of Organizations. 3 Credits.

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. 3 Credits.

Offered intermittently. Prereq., SOCI 101S. 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. 3 Credits.

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. 3 Credits.

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. 3 Credits.

Offered autumn even-numbered years. Prereq., SOCI 101S, SOCI 221 and either SOCI 211S or SOCI 260S. An examination of policing in society, with emphasis on the cultural context in which it occurs, its structural characteristics, and social psychological processes.

SOCI 382 - Soc Psych and Social Structure. 3 Credits.

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, power, status, self-concept formation, and decision-making.

SOCI 386 - Preceptorship in Sociology. 2-3 Credits.

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. 1-6 Credits.

(R-6) Offered intermittently. Experimental offerings of new courses or one time offerings of current topics.

SOCI 398 - Internship. 1-6 Credits.

(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.

SOCI 423 - Sociology of Corrections. 3 Credits.

Offered spring. Prereq., SOCI 101S, SOCI 221 and either SOCI 211S or SOCI 260S. 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. 3 Credits.

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. 3 Credits.

Offered every term. Prereq., WRIT 101 or equivalent, one intermediate writing course and consent of instructor. Advanced studies in criminology theory, research, and practice. This course will meet the upper-division writing expectation for sociology majors only.

Gen Ed Attributes: Writing Course-Advanced

SOCI 441 - Capstone: Inequal and Soc Just. 3 Credits.

Offered spring. Prereq., WRIT 101 or equivalent, one intermediate writing course, SOCI 101S, 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 advanced writing expectation.

Gen Ed Attributes: Writing Course-Advanced

SOCI 442 - ISJ Service Learning. 3-4 Credits.

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.

SOCI 443 - Sociology of Poverty. 3 Credits.

Offered autumn. Prereq. junior or senior standing or consent of instr. An examination of the roots, prevalence, and social characteristics of poverty. Analysis of policies intended to end poverty.

SOCI 446 - Prost & Human Trafficking. 3 Credits.

Offered every other year. Exploration of prostitution and human trafficking, their incidence, causes, implications for individuals and society, and responses from non-governmental organizations and governments. Highlights various feminist and human rights approaches to these phenomena.

SOCI 455 - Classical Sociological Theory. 3 Credits.

Offered autumn and spring. Prereq., SOCI 101S, or consent of instr. Exploration of the classical foundations of sociological theories, emphasizing Marx, Durkheim, and Weber. Required of all sociology majors.

SOCI 470 - Environmental Sociology. 3 Credits.

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 471 - Gender and Global Development. 3 Credits.

Offered every other year. Prereq., SOCI 270 or SOCI 275S or consent of instructor. Advanced perspectives on the relationships between gender and colonization, international development, and globalization.

SOCI 485 - Political Sociology. 3 Credits.

Offered spring odd-numbered years. Prereq., junior or senior standing. Analysis of power; states; institutional interrelationships; production and transmission of ideologies; political participation and membership; social movements.

SOCI 488 - Writing for Sociology. 3 Credits.

Offered autumn and spring. Prereq., WRIT 101 or equivalent, one intermediate writing course and consent of instructor. 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.

Gen Ed Attributes: Writing Course-Advanced

SOCI 491 - Special Topics. 1-6 Credits.

(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. 1-3 Credits.

(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. 2-3 Credits.

Offered intermittently. Prereq., SOCI 101S and at least junior standing. Selected sociological topics.

SOCI 498 - Internship. 1-6 Credits.

(R-12) 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.

SOCI 520 - Contemp Social Theory. 3 Credits.

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 538 - Sem in Crime & Deviance. 3 Credits.

(R-9) 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. 3 Credits.

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. 3 Credits.

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. 3 Credits.

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. 3 Credits.

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. 1-6 Credits.

(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

SOCI 594 - Graduate Seminar. 3 Credits.

(R-9) Offered intermittently. Selected sociological topics. Level: Graduate

SOCI 595 - Special Topics. 1-12 Credits.

(R-12) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. Level: Graduate

SOCI 596 - Independent Study. 1-6 Credits.

(R-6)Offered every term. Prereq., consent of instr. Work with a faculty supervisor in an area of special interest. Level: Graduate

SOCI 597 - Graduate Research. 2-3 Credits.

(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. 1-6 Credits.

(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

SOCI 599 - Thesis/Professional Paper. 1-6 Credits.

(R-6) Offered every term. Students may apply six credits of 599 toward graduation. Level: Graduate

South/Southeast Asian Studies (SSEA) < University of Montana

South/Southeast Asian Studies (SSEA)

SSEA 202X - Introduction to India. 3 Credits.

Offered alternate years. 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.

Gen Ed Attributes: Historical Studies, Cultural Intl Diversity (X)

SSEA 234X - Hindu Religious Traditions. 3 Credits.

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.

Gen Ed Attributes: Cultural Intl Diversity (X)

SSEA 330X - Peoples and Cultures of World. 3 Credits.

Offered intermittently. Same as ANTY 330X. Ethnographic survey of societies and cultures of Indonesia and the Philippines.

SSEA 342 - Topics Comparative Lit & Rel. 3 Credits.

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 368 - Contemporary Buddhism in SSEA. 3 Credits.

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.

Spanish (SPNS) < University of Montana

Spanish (SPNS)

SPNS 101 - Elementary Spanish I. 4 Credits.

Offered autumn. Emphasis on oral communication, with development in all major skill areas: listening, speaking, reading and writing.

SPNS 102 - Elementary Spanish II. 4 Credits.

Offered spring. Prereq., SPNS 101. Continuation of 101.

Gen Ed Attributes: Foreign Language Requirement

SPNS 191 - Special Topics. 1-9 Credits.

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

SPNS 201 - Intermediate Spanish I. 4 Credits.

Offered autumn. Prereq., SPNS 102. Continued practice in the oral skills with added emphasis on grammar and reading proficiency.

Gen Ed Attributes: Foreign Language Requirement

SPNS 202 - Intermediate Spanish II. 4 Credits.

Offered spring. Prereq., SPNS 201. Continuation of 201.

Gen Ed Attributes: Foreign Language Requirement

SPNS 291 - Special Topics. 1-9 Credits.

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

SPNS 292 - Independent Study. 1-6 Credits.

(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. 3 Credits.

Offered autumn and spring. Prereq., SPNS 202 or equiv. Development of oral and written skills with an emphasis on Hispanic cultural context.

Gen Ed Attributes: Foreign Language Requirement

SPNS 302 - Spanish in Oral and Written Expression II. 3 Credits.

Offered spring. Prereq., SPNS 202 or equiv. Further development of oral and written skills with an emphasis on Hispanic cultural context.

SPNS 305 - Spanish Phonetics. 3 Credits.

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. 3 Credits.

(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. 1-9 Credits.

(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. 3 Credits.

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. 3 Credits.

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 - Cultures and Societies of Latin America. 3 Credits.

Offered autumn and spring. Prereq., SPNS 202 or equiv. An interdisciplinary introduction to Latin American culture, society, and history with emphasis on contemporary aspects.

SPNS 355 - Topics in Spanish Lit/Culture. 1-9 Credits.

(R?9) Offered intermittently in spring. Prereq., SPNS 326 or SPNS 331 or consent of instr.

SPNS 391 - Special Topics. 1-9 Credits.

(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. 1-6 Credits.

Course material appropriate to the needs and objectives of the individual student.

SPNS 398 - Internship. 1-6 Credits.

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.

SPNS 400 - Introduction to Spanish Linguistics. 3 Credits.

Offered autumn. Prereq., SPNS 305. Topics in Spanish linguistics with an emphasis on Spanish morphology, syntax and semantics.

SPNS 408 - Spanish: Adv Comp & Conversat. 3 Credits.

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. 3 Credits.

(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. 3 Credits.

(R-6) Offered autumn even-numbered years. Prereq., SPNS 326 or 331 or consent of instr.

SPNS 466 - Spanish Lit:Modern & Contemp. 3 Credits.

(R-6) Offered spring even-numbered years. Prereq., SPNS 326 or 331 or consent of instr.

SPNS 491 - Special Topics. 1-9 Credits.

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

SPNS 492 - Independent Study. 1-6 Credits.

(R-6) Offered autumn and spring. Course material appropriate to the needs and objectives of the individual student.

SPNS 494 - Seminar. 1-12 Credits.

(R?12) Offered regularly. Prereq., SPNS 326 or 331. Studies in major authors, periods, or genres.

SPNS 498 - Internship. 1-6 Credits.

SPNS 500 - Directed Readings. 1-3 Credits.

(R?6) Offered intermittently. Prereq., undergraduate major in Spanish. Level: Graduate

SPNS 594 - Graduate Seminar. 3 Credits.

(R?6) Offered intermittently. Prereq., graduate standing. A review and discussion of current research. Topics vary. Level: Graduate

SPNS 595 - Special Topics. 1-6 Credits.

(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

SPNS 596 - Independent Study. 1-6 Credits.

(R?6) Offered intermittently. Prereq., graduate standing. Out?of?class independent work of a research nature which involves intensive use of University or other libraries; also research work carried on in another country under the direction of a University professor. Level: Graduate

SPNS 599 - Professional Paper. 1-6 Credits.

(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. 1-9 Credits.

(R?9) Offered intermittently. Prereq., graduate standing. Preparation of a thesis or manuscript based on research for presentation and/or publication. Level: Graduate

Statistics - Mathematics (STAT) < University of Montana

Statistics - Mathematics (STAT)

STAT 216 - Introduction to Statistics. 4.000 Credits.

Offered autumn and spring. Prereq., M 115 (preferred), or one of M 121, M 132, M 140, M 151, M 162 or M 171, or ALEKS placement >= 4, or M02-Maplesoft Algebra score >= 12. Introduction to major ideas of statistical inference. Emphasis is on statistical reasoning and uses of statistics.

Gen Ed Attributes: Math Competency Course

STAT 292 - Independent Study. 1-6 Credits.

(R-6) Offered intermittently. Prereq., consent of instr. Guidance of an individual student in doing independent study on material not offered in a regular course.

STAT 341 - Introduction to Probability and Statistics. 3 Credits.

Offered autumn and spring. Prereq., one of M 162, M 172 or M 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. 3 Credits.

Offered autumn. Prereq., M 273 or consent of instructor (STAT 341 recommended). Fundamentals of probability; discrete and continuous random variables; expected value; variance; joint, marginal, and conditional distributions; conditional expectations; applications; simulation; central limit theorem; order statistics. Level: Undergraduate-Graduate

STAT 422 - Mathematical Statistics. 3 Credits.

Offered spring. Prereq., STAT 421. Introduction to the theory of point estimation, interval estimation, and hypothesis testing. Level: Undergraduate-Graduate

STAT 451 - Statistical Methods I. 3 Credits.

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, except toward the mathematics education concentration. 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. Level: Undergraduate-Graduate

STAT 452 - Statistical Methods II. 3 Credits.

Offered spring. Prereq., STAT 451. Continuation of STAT 451. Multiple regression, experimental design, analysis of variance, other statistical models. Level: Undergraduate-Graduate

STAT 457 - Computer Data Analysis I. 1 Credit.

Offered autumn. Coreq., STAT 451 or consent of instr. An introduction to software for doing statistical analyses. Intended primarily for students in STAT 451. Level: Undergraduate-Graduate

STAT 458 - Computer Data Analysis II. 1 Credit.

Offered spring. Coreq., STAT 452 or consent of instr. Continuation of STAT 457. Intended primarily for students in STAT 452. Level: Undergraduate-Graduate

STAT 491 - Special Topics. 1-9 Credits.

(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. Level: Undergraduate-Graduate

STAT 542 - Applied Linear Models. 3 Credits.

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. 4 Credits.

Offered spring even-numbered years. Prereq., STAT 452 or STAT 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. 3 Credits.

(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. 3 Credits.

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 549 - Applied Sampling. 3 Credits.

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. 1-12 Credits.

(R-12) Offered autumn and spring. Prereq., consent of instr. A review and discussion of current research. Level: Graduate

Surgical Technology (AHST) < University of Montana

Surgical Technology (AHST)

AHST 101 - Introduction to Surgical Techn. 3 Credits.

Offered spring. Offered at Missoula College. 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.

AHST 115 - Surgical Lab I. 2 Credits.

Offered spring. Offered at Missoula College. Prereq., admission to the program. Demonstration of sterile technique in the campus lab, various skills and their application in the operating room.

AHST 154 - Surgical Pharmacology. 3 Credits.

Offered spring. Offered at Missoula College. Prereq., admission to the program, M 090. Basic overview of the medications commonly used before, during, and after a surgical procedure.

AHST 164 - Micro for the Surg Tech. 3 Credits.

Offered at Missoula College.

AHST 191 - Special Topics. 1-9 Credits.

(R-9) Offered intermittently. Offered at Missoula College. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

AHST 200 - Operating Room Techniques. 5 Credits.

Offered autumn. Offered at Missoula College. Prereq., AHST 101, 115, and 154. Focus is on the scrub and circulator roles of the surgical technologist in the preoperative, intraoperative, and postoperative periods, more complex skills and theories, and the impact of new technologies in the 21st century operating room.

AHST 201 - Surgical Procedures I. 4 Credits.

Offered autumn. Offered at Missoula College. Prereq., AHST 101, 115, and 154. A study of surgical procedures following the patient through the preoperative, intraoperative, and post-operative stages of specific surgical specialties.

AHST 202 - Surgical Procedures II. 5 Credits.

Offered spring. Offered at Missoula College. A study of surgical procedures following the patient through the preoperative, intraoperative, and postoperative stages of specific surgical specialties.

AHST 215 - Surgical Lab II. 2 Credits.

Offered autumn. Offered at Missoula College. Demonstration of more complex skills in the campus lab, including assistant circulating, and their applications in the operating room.

AHST 250 - Surgical Clinical I. 4 Credits.

Offered autumn. Offered at Missoula College. Perioperative experience in minor surgical procedures through a supervised clinical hospital rotation.

AHST 251 - Surgical Clinical II. 5 Credits.

Offered spring. Offered at Missoula College. Perioperative experience in major surgical procedures through a supervised clinical hospital rotation.

AHST 298 - Surgical Internship. 5 Credits.

Offered spring. Offered at Missoula College. 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.

Surveying (SRVY) < University of Montana

Surveying (SRVY)

SRVY 108 - Construction Surveying. 2 Credits.

Offered autumn. Offered at Missoula College. 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.

SRVY 230 - Intro to Srvyg for Engineers. 3 Credits.

Offered spring. Offered at Missoula College. M 090 or appropriate score on math-skills test recommended prior to taking course. Basic principles of civil surveying and the use of surveying equipment. Surveying introduces students to the link between field (construction) and office (design) practices. Students will become familiar with Global Positioning Systems (GPS), levels, level rods, total stations, basic survey computations, and their relationship to Computer Design Systems.

Sustainable Energy (NRGY)

NRGY 101N - Intro to Sustainable Energy. 3 Credits.

Offered autumn. Offered at Missoula College. A survey of traditional energy systems and technologies. Introduces conventional primary energy sources--coal, oil, gas, nuclear--and examines the technologies used to capture, convert, distribute, store, and utilize these energy sources. Consideration is given to physical and engineering aspects, as well as economic, social environmental, and political factors that determine the sustainability of these sources.

NRGY 102 - Intro to Sustainable Energy II. 3 Credits.

Offered autumn and spring. Offered at Missoula College. Prereq., NRGY 101 or consent of instructor. Same as CCS 102. A survey of renewable energy systems and technologies. Addresses physical and technical aspects of wind, solar, geothermal, hydro, tidal, biological, and wave energy systems. Consideration is given to engineering, economic, social, environmental, and political factors that determine implementation and sustainability. Credit not allowed for both NRG 102 and CCS 102.

NRGY 120 - Industrial Safety and Rigging. 3 Credits.

Offered autumn. Offered at Missoula College. This course provides an overview of safe industrial practices and provides students with hands-on experiences in rigging for a variety of industries. Students will complete the requirements for an OSHA 30 certification, construct a scaffold system, identify equipment for shifting heavy loads such as may be used in the wind and solar industries. Load security, fall gear, arrest equipment, confined spaces, safety data sheets will be covered. Students will also learn elements of first aid, cardio-pulmonary resuscitation (CPR), and proper use of Automated External Defibrillators (AED's).

NRGY 191 - Special Topics. 1-3 Credits.

(R-6) Offered intermittently. Offered at Missoula College. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

NRGY 192 - Independent Study. 1-6 Credits.

(R-6) Offered intermittently. Offered at Missoula College. Course material appropriate to the needs and objectives of the individual student.

NRGY 195 - Practicum. 2 Credits.

Offered summer. Offered at Missoula College. Prereq., NRGY 101, M 121 or consent of instructor. Same as CCS 191. The practicum provides students with a supervised field experience. Students will gain hands-on experience with energy specific technologies in a fast-paced creative environment. This course increases students' occupational awareness and professionalism.

NRGY 196 - Independent Study. 1-6 Credits.

(R-6) Offered intermittently. Offered at Missoula College. Course material appropriate to the needs and objectives of the individual student.

NRGY 243 - Fundmtl PV Design & Install. 3 Credits.

Offered spring. Offered at Missoula College. Prereq., M 121, Prereq./Co-req., ETEC 105. An introduction to the fundamental principles and technologies of solar photovoltaic energy systems. Emphasis on system design and installation, including site and resource assessment, load analysis, troubleshooting, and cost analysis. The material covered prepares students for a career in renewable energy or for installing a renewable energy system on their own home.

NRGY 244 - Bioenergy. 3 Credits.

Offered spring. Offered at Missoula College. Prereqs., SCN 175N, M 121 and NRGY 102, or consent of instructor. Investigates the physical nature of various biorenewable resources and the technologies currently employed to produce, harvest, refine and convert these into useable energy, feedstocks and products.

NRGY 245 - Fuel Cells. 3 Credits.

Offered spring. Offered at Missoula College. Prereq., NRGY 101, M 121. An introduction to the different types of fuel cells (hydrogen, biological, metal/air, proton exchange membrane, etc.) accompanied by a critical examination of their applications, operation, efficiencies, advantages and disadvantages. Students must purchase a fuel cell kit for a laboratory component.

NRGY 250 - Energy Finance. 3 Credits.

Offered summer. Offered at Missoula College. An introduction to the terminology, policies, and mathematical models for financing energy technology projects. Concepts covered include time value of money, tax code, triple bottom line, and cost-benefit analysis. Microsoft Excel will be used.

NRGY 290 - Undergraduate Research. 1-10 Credits.

Offered every term. Offered at Missoula College. Preq., consent of instr. Independent research under the direction of a faculty member.

NRGY 291 - Special Topics. 1-4 Credits.

(R-6) Offered intermittently. Offered at Missoula College. Experimental offerings of Energy Technology faculty and visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

NRGY 292 - Independent Study. 1-9 Credits.

(R-6) Offered intermittently. Offered at Missoula College. Course material appropriate to the needs and objectives of the individual student.

NRGY 295 - Practicum. 2 Credits.

Offered at Missoula College. The practicum provides students with a supervised field experience. Students will gain hands-on experience with energy specific technologies in a fast-paced creative environment. This course increases students' occupational awareness and professionalism.

NRGY 298 - Internship. 2 Credits.

Offered every term. Prereq., M 121 and consent of instructor. Same as CCS 298. Extended classroom experience providing practical application of classroom learning through on the job training in a student's field of study. This experience increases student skills, prepares them for initial employment, and increases occupational awareness and professionalism.

NRGY 299 - Energy Technology Capstone. 3 Credits.

(R-9) Offered spring and autumn. Offered at Missoula College. Students participate in an energy technology design, building, testing, and competition. Previous examples include participation in the Shell EcoMarathon and the American Society of Mechanical Engineering Human Powered Vehicle Challenge. This course is very time intensive and will require meetings outside of regularly scheduled class times. Travel to competition is strongly encouraged, but not required.

Theatre (THTR) < University of Montana

Theatre (THTR)

THTR 101L - Introduction to Theatre. 3.000 Credits.

Offered autumn and spring. The various elements of play production and dance. The basic artistic principles underlying dance, theatre and all of the arts.

Gen Ed Attributes: Lit & Artistic Studies (L), Democracy and Citizenship (Y)

THTR 102A - Introduction to Theatre Design. 3 Credits.

Offered autumn. Basic understanding of the principles of design for the theatre and television, including the production elements of scenery, costumes and lighting.

Gen Ed Attributes: Expressive Arts Course (A)

THTR 103 - Introd to House Management. 1 Credit.

(R-3) Offered autumn and spring. Introduction to the skills and experience of the front-of-house staff for a theatrical production.

THTR 106 - Theat Prod I: Run Crew. 1 Credit.

(R-6) Offered autumn and spring. Operation and running a show backstage on a scenery, costume, or prop crew for a major school production.

THTR 107A - Theat Prod I: Constr Crew. 3 Credits.

(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.

Gen Ed Attributes: Expressive Arts Course (A)

THTR 113A - Introduction to Voice Acting. 3 Credits.

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.

Gen Ed Attributes: Expressive Arts Course (A)

THTR 120A - Introduction to Acting I. 3 Credits.

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.

Gen Ed Attributes: Expressive Arts Course (A)

THTR 121 - Introduction to Acting II. 3 Credits.

Offered autumn and spring. Prereq., THTR 120A. Continuation of 120A.

THTR 155 - Drawing Fundamntls for Theatre. 3 Credits.

Offered spring. Students will begin to develop skills in drawing the human form, perspective, and architecture.

THTR 191 - Special Topics/Exprmtl Courses. 1-6 Credits.

(R-6) Offered autumn and spring. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

THTR 194 - Seminar/ Workshop. 1-8 Credits.

THTR 202 - Stagecraft I. 3 Credits.

Offered autumn. Fundamental theories and hands-on application in the areas of costuming, lighting, scenery, and properties.

THTR 203 - Stagecraft II: Scenery & Props. 3.000 Credits.

Offered spring. Fundamental theories and hands-on application in the areas of scenery, properties, and rigging.

THTR 205 - Theatre Workshop II. 1-8 Credits.

(R-8) Offered autumn and spring. Credit for students engaged in any aspect of production including acting, directing, lighting, stagecraft, makeup, costumes, properties, business and publicity.

THTR 206 - Theat Prod II: Run Crew. 1 Credit.

(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. 3 Credits.

(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. 3 Credits.

Offered autumn. Prereq., THTR 221 or consent of instr. Voice production, phonetics and speech for the stage.

THTR 211 - Voice & Speech II. 3 Credits.

Offered spring. Prereq., THTR 210. Dialects, accents, and continued development of good voice and speech skills.

THTR 220 - Acting I. 3 Credits.

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.

THTR 221 - Acting II. 3 Credits.

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 229 - Production Acting I. 1 Credit.

(R-4) Offered autumn and spring. Credit for acting in approved Drama/Dance productions.

THTR 235L - Dramatic Literature. 3 Credits.

Offered autumn and spring. The study of representative texts in dramatic literature as a foundation for play analysis.

Gen Ed Attributes: Lit & Artistic Studies (L)

THTR 239A - Creative Drama/Dance: K-8. 2 Credits.

Offered autumn and spring. Restricted to majors in Elementary Education and Early Childhood Education: P-3. 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.

Gen Ed Attributes: Expressive Arts Course (A)

THTR 245 - Int Costume Construction. 3 Credits.

Offered spring. Intermediate costume construction focusing on the development of skills needed to function as a stitcher.

THTR 249 - Stage Makeup. 2 Credits.

Offered spring. Principles of and practice in theatrical makeup. Students will work on makeup for major productions.

THTR 255 - Drafting for Theatre I. 3 Credits.

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. 2 Credits.

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 291 - Special Topics. 1-6 Credits.

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

THTR 292 - Independent Study. 1-12 Credits.

(R-12) Offered autumn and spring. Independent study in all the arts of the theatre.

THTR 294 - Seminar. 1-6 Credits.

Foundational preparation for professional and curricular auditions.

THTR 305 - Theatre Workshop III. 1-20 Credits.

(R-20) Offered autumn and spring. Prereq., consent of instructor. Advanced laboratory production in all the arts of the theatre.

THTR 306 - Summer Theatre. 1-12 Credits.

(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. 3 Credits.

(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. 1-12 Credits.

(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. 1-12 Credits.

(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. 3 Credits.

Offered autumn. An advanced exploration of voice acting skills and techniques culminating in the application of industry standards and best practices to recorded and live performances.

THTR 311 - Voice and Speech IV: Poetic Language. 3 Credits.

Offered spring. Integration of voice and speech skills, vocal character.

THTR 315 - Physical Performance Skills I. 3 Credits.

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. 3 Credits.

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. 3 Credits.

Offered autumn. Prereq., THTR 221. Selected scenes and projects from European and American realistic texts such as Chekhov, Ibsen, Strindberg, and Shaw.

THTR 321 - Contemporary Acting Practice. 3 Credits.

Offered spring. Prereq., THTR 320 and BFA theatre major. This course will introduce a variety of contemporary theatre and actor-training methods to interrogate contemporary scripts. Students perform selected scenes using chosen strategies from the methodologies studied.

THTR 322 - Musical Theatre Audition Techniques. 2 Credits.

Offered spring. Prereq., THTR 320. A foundational studio course which focuses on the development and practice of musical-theatre audition skills. The course will comprise specialized training in requisite areas of singing, acting, dancing and materials preparation pertaining to the format, demands and performance of musical-theatre auditions.

THTR 329 - Production Acting II. 1 Credit.

(R-4) Offered autumn and spring. Prereq., THTR 229A. Credit for acting in approved Theatre & Dance productions.

Gen Ed Attributes: Expressive Arts Course (A)

THTR 330H - Theatre History I. 3 Credits.

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.

Gen Ed Attributes: Historical Studies, Writing Course-Intermediate

THTR 331Y - Theatre History II. 3 Credits.

Offered spring. Prereq., WRIT 101 or equivalent, one intermediate writing course, THTR 330H or theatre minor. Continuation of THTR 330H. The many and varied periods since the 19th century as reflected in the theatre of the times in America and Europe.

Gen Ed Attributes: Writing Course-Advanced, Democracy and Citizenship (Y)

THTR 332 - Dramaturgy. 3 Credits.

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. 3 Credits.

Offered intermittently. History of Western costume from ancient Egypt to the present day.

THTR 340 - Costume Design I. 3 Credits.

Offered autumn. Prereq., THTR 102A, 202. Introduction to principles and practices of stage costume design.

THTR 345 - Flat Pattern Des & Drafting. 3 Credits.

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. 3 Credits.

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. 3 Credits.

Offered autumn. Prereq., THTR 102A, 202. 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, and dance.

THTR 351 - Production Design for Film and Television. 3 Credits.

Offered autumn and spring. Introduction to the basic elements of production design for film and television. Students will be exposed to the basics of visual storytelling, including script analysis for production design, storyboards, shot composition, visual research, drafting, and pre-production planning. Students will also gain an understanding of location versus studio work and film versus television design.

THTR 353 - Technical Direction. 1-3 Credits.

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. 3 Credits.

(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. 1-3 Credits.

(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. 3 Credits.

Offered autumn. Prereq., THTR 102A, 202. 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. 3 Credits.

Offered autumn. Prereq., THTR 102A, 202, 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. 2 Credits.

Offered autumn. Prereq., THTR 202. 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. 1-3 Credits.

(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. 3 Credits.

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. 3 Credits.

(R-6) Offered intermittently. Techniques and practice in writing short and full-length plays.

THTR 385 - Theatre for Social Justice. 3 Credits.

Offered spring. This course explores ways in which drama can be used as a tool to examine, bring awareness to, and affect social issues, including equality, health care, education, trauma, politics, and the penal system.

THTR 391 - Special Topics/Exprmtl Courses. 1-9 Credits.

(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. 1-12 Credits.

(R-12) Offered autumn and spring. Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student.

THTR 394 - Seminar/ Workshop. 1-6 Credits.

THTR 395 - Practicum. 1-3 Credits.

(R-18) Offered autumn and spring. Service learning experience in theatre in a setting compatible with the students major and interests.

THTR 398 - Cooperative Eductn/Internship. 1-6 Credits.

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.

THTR 405 - Professional Theatre. 9 Credits.

(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. 1-9 Credits.

(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. 1-12 Credits.

(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. 1-12 Credits.

(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. 1-12 Credits.

(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 - Advanced Acting: Musical Theatre. 2 Credits.

(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 510.

THTR 415 - Stage Combat. 3 Credits.

Offered spring. Prereq., THTR 315 or consent of instructor. This course is intended for advanced students with a background in physical performance. Topics include unarmed stage combat, basic armed combat, and physical performance safety methods and procedures. Students will present the skills learned in the performance of scenes including fight choreography.

THTR 416 - Physical Performance Skills IV. 3 Credits.

Offered spring. Advanced specialized physical skills such as period styles, advanced combat/choreography, and commedia.

THTR 420 - Advanced Acting: Comedy Styles. 3 Credits.

Offered autumn. Prereq., THTR 321 and BFA acting specialization, or consent of instr. Scenes and projects from specific historical and contemporary comedy styles. Co-convenes with THTR 526.

THTR 421 - Advanced Acting: Shakespeare. 3 Credits.

Offered spring. Prereq., THTR 420. Selected speeches, scenes and projects from verse drama, especially Shakespeare.

THTR 423 - Professional Performance. 1-9 Credits.

(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. 3 Credits.

Offered autumn. Prereq., THTR 421. Performance and scene work in contemporary practice and theory.

THTR 426 - Acting VIII. 3 Credits.

Offered spring. Developing professional skills, material for the actor, professional portfolio, resume audition material, commercial acting, performance market research.

THTR 429 - Production Acting III. 1 Credit.

(R-9) Offered autumn and spring. Prereq., THTR 329. Credit for acting in approved Theatre & Dance productions.

THTR 439 - Methods of Teaching Theatre. 3 Credits.

(R-6) Offered autumn. Prereq., consent of instr. Building and addressing specific curriculum in theatre arts.

THTR 440 - Costume Design II. 3 Credits.

(R-9) Offered spring. Prereq., THTR 340. Advanced techniques in costume design; possible topics include design for dance, opera, large scale drama and musicals.

THTR 445 - Draping. 3 Credits.

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. 3 Credits.

Offered spring alternate years. Prereq., consent of instr. Principles used in the construction of tailored garments.

THTR 450 - Scene Design II. 3 Credits.

Offered spring. Prereq., THTR 350. A continuation of the techniques and projects in 350.

THTR 456 - Advanced Scene Painting. 3 Credits.

(R-9) Offered spring. Prereq., THTR 356 and/or consent of instr. Students will explore advanced scene painting techniques.

THTR 460 - Theatre Lighting II. 3 Credits.

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.

THTR 465 - Theatre Sound II. 3 Credits.

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.

THTR 470 - Stage Management II. 2 Credits.

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. 3 Credits.

(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. 3 Credits.

Offered autumn. Prereq., THTR 375 or consent of instr. Directing skills for the advanced student; extensive scene work.

THTR 476 - Directing III. 3 Credits.

Offered spring. Prereq., THTR 475. Continuation of 475. Course material coordinated with laboratory projects

THTR 481 - Adv Acting: Persnl Performance. 3 Credits.

Offered autumn. Prereq., THTR 321 or consent of instr. Developing personal performance skills.

THTR 482 - Adv Acting: Solo Performance. 3 Credits.

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. 1 Credit.

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. 1-12 Credits.

(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.

THTR 491 - Special Topics/Exprmtl Courses. 1-9 Credits.

(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. 1-12 Credits.

(R-24) Offered intermittently. Prereq., consent of school director. Independent work under the University omnibus option. See index.

THTR 494 - Seminar/Workshop. 2 Credits.

(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. 1-3 Credits.

(R-9) Offered intermittently autumn and spring. Service learning experience in theatre in a setting compatible with the students major and interests.

THTR 498 - Cooperative Eductn/Internship. 1-6 Credits.

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.

THTR 499 - Senior Project. 1 Credit.

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. 1 Credit.

Offered autumn. Introduction to basic research and writing skills. Level: Graduate

THTR 505 - Professional Theatre. 9 Credits.

(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. 1-3 Credits.

(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 students 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. 2-4 Credits.

(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. 2-4 Credits.

(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. 3 Credits.

(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 Musical Theatre. 2 Credits.

(R-4) Offered spring. 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

THTR 512 - Prob in Voice/Speech. 1-3 Credits.

(R-12) Offered intermittently. Development of specific advanced skills in vocal work. Level: Graduate

THTR 513 - Grad Voice & Speech I. 3 Credits.

Offered autumn. Studio training with extensive focus on exercises designed to foster awareness of how the body, breath, voice, resonance, and enunciation are the artists tactics when acting. Level: Graduate

THTR 514 - Graduate Voice & Speech II. 3 Credits.

Offered spring. Continuation of 513; advanced studio encompassing standard speech, character voice, accent and dialect-acquisition studies. Level: Graduate

THTR 515 - Grad Phys Performance Skills. 3 Credits.

Offered autumn. 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 Physical Performance. 1-3 Credits.

(R-12) Offered autumn and spring. Development of specific advanced skills in physical performance. Level: Graduate

THTR 520 - Graduate Acting I. 3 Credits.

(R-12) Offered autumn. Intensive rehearsal and project work with emphasis on integration of advanced skills. Level: Graduate

THTR 521 - Grad Acting II. 3 Credits.

Offered spring. Continuation of 521; intimate exploration of monologues, scene work, and contemporary techniques. Level: Graduate

THTR 525 - Problems in Acting. 1-3 Credits.

(R-18) Offered autumn and spring. Development of specific advanced skills in acting. Level: Graduate

THTR 526 - Studio Training I. 3 Credits.

Offered autumn. Scenes and projects from specific historical and contemporary comedy styles. Co-convenes with THTR 420. Level: Graduate

THTR 527 - Studio Training II. 3 Credits.

Offered spring. Work in speeches, scenes, and projects from Shakespeare and other classical verse drama. Co-convenes with THTR 421. Level: Graduate

THTR 528 - Studio Training III. 3 Credits.

Offered autumn. 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

THTR 529 - Studio Training IV. 3 Credits.

Offered spring. 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

THTR 530 - Grad Sem Dramatic Lit. 3 Credits.

(R-9) Offered intermittently. 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. 3 Credits.

(R-9) Offered intermittently. 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. 3 Credits.

A graduate-level introduction to literary, historical, and contextual analysis of play scripts and performance pieces intended for production. Level: Graduate

THTR 535 - Perform Theory & Criticism. 3 Credits.

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. 3 Credits.

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

THTR 540 - Graduate Costume Design. 3 Credits.

(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

THTR 542 - Prob in Costume Design. 3 Credits.

(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. 2 Credits.

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. 2 Credits.

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. 3 Credits.

(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

THTR 552 - Prob in Scene Design. 3 Credits.

(R-12) Offered autumn and spring. Prereq., consent of instr. Development of specific technical skills in scene design. Level: Graduate

THTR 553 - Technical Direction. 3 Credits.

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. 3 Credits.

(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. 2 Credits.

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. 3 Credits.

(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

THTR 562 - Prob in Light Design. 3 Credits.

(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. 3 Credits.

(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

THTR 567 - Problems in Sound Design. 3 Credits.

(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. 2 Credits.

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. 1-6 Credits.

(R-18) Offered autumn and spring. Prereq., consent of instr. Practical work in stage management projects. Level: Graduate

THTR 574 - Prob Theatre Mgmt. 1-6 Credits.

(R-18) Offered intermittently. Prereq., consent of instr. Level: Graduate

THTR 577 - Directing IV. 3 Credits.

Offered autumn. 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. 3 Credits.

Offered spring. Exploration of image, time manipulation, and nonlinear storytelling. Level: Graduate

THTR 580 - Problems in Playwriting. 1-3 Credits.

(R-12) Offered intermittently. Development of specific advanced writing projects based on dramatic structure, conflict, tension, and character complexities/psychology. Level: Graduate

THTR 590 - Research. 1-6 Credits.

(R-24) Offered autumn and spring. Prereq., consent of instr. Level: Graduate

THTR 591 - Special Topics. 1-18 Credits.

(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

THTR 592 - Independent Study. 1-6 Credits.

(R-24) Offered autumn and spring. Prereq., consent of instr. Level: Graduate

THTR 594 - Seminar. 1-3 Credits.

(R-12) Offered intermittently. Prereq., consent of instr. A review and discussion of current research. Topics vary. Level: Graduate

THTR 595 - Practicum. 1-3 Credits.

(R-12) Service learning experience in theatre in a setting compatible with the students major and interests. Level: Graduate

THTR 597 - Educational Methods. 1-6 Credits.

(R-24) Offered autumn and spring. Prereq., consent of instr. Level: Graduate

THTR 598 - Internship. 2-6 Credits.

(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

THTR 599 - Professional Paper. 1-4 Credits.

(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. 2 Credits.

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. 2 Credits.

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. 2 Credits.

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. 3 Credits.

Offered autumn. The history and literature of directing. Level: Graduate

THTR 677 - Problems in Directing. 1-3 Credits.

(R-18) Offered autumn and spring. Level: Graduate

THTR 690 - Research. 1-6 Credits.

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 695 - Grad Final Creative Project. 1-6 Credits.

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 698 - Internship. 1-6 Credits.

THTR 699 - Thesis. 1-12 Credits.

(R-12) Offered autumn and spring. Preparation of a thesis or manuscript based on research for presentation and/or publication. Level: Graduate

Welding (WLDG) < University of Montana

Welding (WLDG)

WLDG 101 - Welding Fund Auto Tech/Diesel. 2 Credits.

Offered autumn. Offered at Missoula College. 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.

WLDG 103 - Welding Fund Constructn Trades. 2 Credits.

Offered spring. Offered at Missoula College. 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 Symbls. 3 Credits.

Offered spring. Offered at Missoula College. 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).

WLDG 145 - Fabrication Basics. 4 Credits.

Offered spring. Offered at Missoula College. Prereq., 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.

WLDG 150 - Welding Layout Techniques. 2 Credits.

Offered autumn. Offered at Missoula College. Using practical layout techniques students develop basics for blueprint construction, layout on pipe and structural steel, and use of tools common to material layout.

WLDG 180 - Shielded Metal Arc Welding. 4 Credits.

Offered autumn. Offered at Missoula College. 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.

WLDG 184 - OSHA Rules & Regulations Wldng. 1 Credit.

Offered spring. Offered at Missoula College. Study of the Occupational Safety and Health Administration rules and regulations that affect the welding and construction industries.

WLDG 187 - Flux Core Arc Welding. 4 Credits.

Offered spring. Offered at Missoula College. 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.

WLDG 191 - Special Topics. 1-6 Credits.

(R-6) Offered intermittently. Offered at Missoula College. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

WLDG 192 - Independent Study. 1-6 Credits.

(R-6) Offered intermittently. Offered at Missoula College. Course material appropriate to the needs and objectives of the individual student.

WLDG 198 - Internship. 1-6 Credits.

WLDG 205 - Applied Metallurgy. 4 Credits.

Offered autumn. Offered at Missoula College. 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.

WLDG 210 - Pipe Welding - Integrated Lab. 4 Credits.

Offered autumn and spring. Offered at Missoula College. 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. Students will be able to attempt welding qualification test as to code procedure set from American Welding Society ?D1.1 Structural Welding Code-Steel. This test will certify them to a determined process on carbon steel from prequalified variables.

WLDG 215 - GTAW (integrated lab). 4 Credits.

Offered autumn. Offered at Missoula College. Prereq., WLDG 180, 187, and 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.

WLDG 245 - Metal Fab Design/Construction. 4 Credits.

Offered spring. Offered at Missoula College. Prereq., 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.

WLDG 275 - Gas Metal Arc Welding. 4 Credits.

Offered spring. Offered at Missoula College. 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.

WLDG 280 - Weld Testing Certification. 2 Credits.

Offered spring. Offered at Missoula College. 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.

WLDG 285 - Automation in Welding. 3 Credits.

Offered spring. Offered at Missoula College. Prereq., WLDG 117, 150, 187, 215. 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.

WLDG 291 - Special Topics. 1-6 Credits.

(R-6) Offered intermittently. Offered at Missoula College. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

Women, Gender & Sexuality Studies (WGSS) < University of Montana

Women, Gender & Sexuality Studies (WGSS)

WGSS 150X - Women's Rights and Women's Roles Around the World. 3 Credits.

Offered intermittently. 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.

Gen Ed Attributes: Cultural Intl Diversity (X)

WGSS 163L - Hist/Lit Persp Women. 3 Credits.

Offered autumn. Formerly PHL 151H, LS 119H, WGS 119H, WGGS 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.

Gen Ed Attributes: Lit & Artistic Studies (L)

WGSS 191 - Special Topics. 1-3 Credits.

WGSS 250 - Media Representations of Women, Men, and Sexuality. 3 Credits.

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 Gender and Sexuality. 3 Credits.

Offered autumn. The course is designed to introduce students to the broad fields of women?s, gender, and sexuality studies through an overview of a number of the theoretical and experiential perspectives of WGSS from a social science perspective. Students will analyze the history of feminism, women?s studies, gender studies, and the growing field of queer studies; biological and psychological theories of gender; the social construction of gender as a product of history and culture; the relationship between gender and other categories of difference (race, sexual orientation, class, ethnicity); family and work; gender-based violence; the relationship between politics, economics, and gender; the representation of gender in popular culture; health and reproduction; and activism.

Gen Ed Attributes: Social Sciences Course (S)

WGSS 291 - Special Topics. 1-6 Credits.

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

WGSS 294 - Seminar. 1-6 Credits.

(R-6) Offered intermittently. A review and discussion of current research. Topics vary.

WGSS 363 - Feminist Theory and Methods. 3 Credits.

Offered spring. Prereq., WRIT 101 or equivalent, and one intermediate writing course. 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.

Gen Ed Attributes: Writing Course-Advanced

WGSS 390 - Undergraduate Research. 1-6 Credits.

(R-6) Offered intermittently. Directed individual research and study appropriate to the back ground and objectives of the student.

WGSS 391 - Special Topics. 1-6 Credits.

(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. 1-12 Credits.

(R-12) Offered intermittently. Course material appropriate to the needs and objectives of the individual student.

WGSS 398 - Coop Education/Internship. 1-6 Credits.

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.

WGSS 463 - WGS Capstone. 2 Credits.

Offered spring. Capstone course for the Women's and Gender Studies majors and minors.

WGSS 490 - Undergraduate Research. 1-6 Credits.

(R-6) Offered intermittently. Directed individual research and study appropriate to the back ground and objectives of the student.

WGSS 491 - Special Topics. 1-6 Credits.

(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. 1-9 Credits.

(R-9) Offered intermittently. Course material appropriate to the needs and objectives of the individual student.

WGSS 494 - Seminar Women & Gender Stds. 3 Credits.

WGSS 594 - Graduate Seminar. 3 Credits.

WGSS 595 - Special Topics. 1-12 Credits.

(R-12) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics. Level: Graduate

WGSS 596 - Independent Study. 1-6 Credits.

(R-6) Offered intermittently. Prereq., consent of instr. Course material appropriate to the needs and objectives of the individual student. Level: Graduate

WGSS 598 - Internship. 1-6 Credits.

(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

WGSS 695 - Special Topics. 1-12 Credits.

Writing (WRIT)

WRIT 095 - Developmental Writing. 3 Credits.

Offered every term. Offered at Missoula College. 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 101 - College Writing I. 3 Credits.

UM: Offered every term. Prereq., WRIT 095 or proof of passing score on writing diagnostic examination, ACT Combined English/Writing 18-31, ACT Writing subscore 7-10, SAT Writing Score 440-690, SAT Essay subscore 7-10, ACT Writing subject score 19-32, ACT English Language Arts (ELA) score 18-31, SAT Writ/Language Test score 25-36. Emphasis on rhetorical understanding, textual analysis, and genre flexibility. Grading A-F, or NC (no credit). ***** Missoula College description for this course: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).

Gen Ed Attributes: Writing Course-Introductory

WRIT 121 - Intro to Technical Writing. 3 Credits.

Offered every term. Offered at Missoula College. Prereq., WRIT 101 (or higher) or equivalent or proof of appropriate SAT/ACT essay, English/Writing, writing section scores, appropriate MUSWA scores, or proof of passing scores on Writing Placement Exam. 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.

Gen Ed Attributes: Writing Course-Intermediate

WRIT 191 - Special Topics. 1-6 Credits.

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

WRIT 192 - Independent Study. 1-6 Credits.

(R-6) Offered intermittently. Offered at Missoula College.

WRIT 198 - Coop Education Experience. 1-12 Credits.

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.

WRIT 201 - College Writing II. 3 Credits.

Offered autumn and spring. Prereq., placement or C or better in WRIT 101, ACT Combined English/Writing 32-36, ACT Writing subscore 11-12, SAT Writing Score 700-800, SAT Essay subscore 11-12, ACT Writing subject score 33 or higher, ACT English Language Arts (ELA) score 32 or higher, SAT Writ/Language Test score 37 or higher. Offers instruction in rhetorical reading and writing, particularly the study and practice of written argumentation in different academic and civic contexts.

Gen Ed Attributes: Writing Course-Intermediate, Writing Course-Introductory

WRIT 325 - Science Writing. 3 Credits.

Offered spring. Prereq., WRIT 101 (or higher) or equivalent 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.

Gen Ed Attributes: Writing Course-Intermediate

WRIT 391 - Special Topics. 1-9 Credits.

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

WRIT 398 - Coop Education Experience. 1-12 Credits.

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.

WRIT 491 - Special Topics. 1-6 Credits.

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

WRIT 492 - Independent Study. 1-3 Credits.

(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.

WRIT 540 - Tchg Coll Levl Composition. 3 Credits.

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

WRIT 595 - Special Topics. 1-9 Credits.

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

WRIT 596 - Grad Independent Study. 1-3 Credits.

(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

Expenses, Services, Organizations

- Expenses
- Organizations
- Services

Expenses < University of Montana

Expenses

General

The student expense information provided in this catalog is based upon the rates for the 2017-18 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 by mail at

Business Services
Lommasson Center
University of Montana-Missoula
Missoula, Montana 59812
by phone at 406-243-2223
or by visiting the Business Services website.

Paying the 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, all students are required to complete their registration by clicking the Pay Registration Bill button in CyberBear. FAILURE TO PAY THE REGISTRATION BILL WILL RESULT IN THE CANCELLATION OF CLASSES FOR THE SEMESTER**. Please see the published payment deadlines on the Registrar's Calendar web page.

Foreign and Canadian checks are not accepted. Credit card payment is accepted using VISA and MasterCard. Payment may be completed electronically via the student s CyberBear account. Payments can be made online via CyberBear:

- E-check
- Credit or debit card

Payment may be mailed to:

University of Montana
Business Services
32 Campus Drive
Missoula, MT 59812

All payments received in the mail should include the student s UM ID number and must be received on or before the published payment deadlines which can be found at the Registrar's Calendar web page.

Tuition and Mandatory Fee Schedules

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 and Post-Baccalaureate,
- Missoula College,
- Graduate,
- Graduate TA/RA,
- Law Fall & Spring,
- WUE Undergraduate,
- Online Undergraduate and Post-Baccalaureate,
- Online Missoula College,
- Online Graduate.

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. Students who are 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.

An online learning fee is assessed on all online courses to partially defray costs associated with courses delivered online over the World Wide Web. Online courses are assessed an additional fee of $48.00 per credit. If a student is registered for all online classes, they have the option to request a change to a distance only student. Students enrolled in all online courses for a term are not assessed some of the mandatory fees that apply to students enrolled in face-to-face courses. The student needs to complete the Distance Only Change of Status form which can be found on the UM Online website.

Montana resident high school eligible students may enroll in Early to College courses through the UM-Missoula College campus. The tuition rate is 50% of the resident Missoula College two-year tuition rate. Mandatory and non-mandatory fees are not assessed except for applicable course fees. Early to College students are not eligible to elect campus services such as the student insurance, Campus Recreation Center, Athletic fee, AUSM fee, and Campus Health Service (may not be all-inclusive).

Audited courses are assessed at the same tuition and fees as courses taken for credit or no-credit.

Delivery of Student Credit Balance Refunds

The University of Montana processes all student credit balance refunds. Refunds are delivered based on the option the student has selected as explained at the Business Services Refund web page. The student needs to select an option only once unless they change or close their bank account or wish to change their option. If the student does not select an option, a check will be sent to their current mailing address. Even if a student does not expect to receive refunds due to financial aid, it is still important to select an option. For instance, a student may have a credit balance if classes are dropped or they withdraw within the first 15 class days, that would create a credit balance refund.

Additional Course Fees

The Board of Regents may approve additional course fees at any time. Additional course 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. The current report on Non-Mandatory Fees can be found on the Business Services Tuition and Fees web page.

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.

Certain programs will also have an additional program tuition added based on the major in which a student is admitted. The programs listed may not be all inclusive and they are Foreign and Conservation Program, Law Program, Masters in Athletic Training Program, Medical Technology Internship Program, Pharmacy Program, Physical Therapy Program, Public Health Program, School of Business Program, Social Work Program and Wildlife Biology Program.

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 the 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.

School of Extended and Life Long Learning (SELL)

Fees, room and board costs for SELL summer programs, and fees for registration in SELL continuing education are contained in separate publications. These publications can be obtained by contacting the School of Extended and Lifelong Learning and Summer Programs

- by phone at 406-243-2900;
- by mail at 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 Fall 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 and Business Services before dropping classes to make sure they fully understand the financial impacts of dropping classes as that 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 or has ceased to attend classes after paying their registration bill, the student should contact the University of Montana Registrar s Office located in the Lommasson Center, and complete an Official Withdrawal form to begin the official withdrawal process. This procedure will enable the University to prorate the tuition and fees assessed based upon the date of withdrawal. A percentage-based refund of tuition and fees does occur when a student officially withdraws before the first day of classes or within the first 15 class days of each term. Students ceasing to attend classes who do not complete an Official Withdrawal form and as a result do not receive any passing grades for the semester will be considered an unofficial withdrawal and will not receive any consideration for refund of tuition and fees.

Students who desire to continue the Blue Cross Health Insurance must contact the Curry Health Center prior to withdrawal within the first 15 class days. Otherwise, the insurance premiums will automatically be refunded and coverage will be lost upon the date of their withdrawal.

For students receiving federal financial aid, they must be attending classes to remain eligible for the federal financial aid they have received or could be eligible to receive. If a student drops courses, stops attending classes (Unofficial Withdrawal), never starts attending a class, or officially withdraws from the University of Montana by completing and submitting the Official Withdrawal form, the University 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 completing the official withdrawal process or if they are not going to continue to attend their classes.** 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. If a student does not complete the Official Withdrawal form and ceases attending and receives no passing grades for the semester the student is an Unofficial Withdrawal.

Students who withdraw from the University after paying their registration bill will receive pro-rated assessment of tuition and fees according to the following schedule. The Summer term is also is subject to a pro-rated assessment of tuition and fees based on the length of each of the sessions within a Summer term.

Refund for Fall and Spring:

	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

Refund

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 student will need to contact both the Residence Life Office located at 101 Turner Hall and UM Dining located on the first floor of the Lommasson Center.

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. The student may still owe a balance to the University.

A student who has officially withdrawn from the term may petition for Hardship consideration if a student meets one of the following conditions or events:

- experiences a catastrophic or life threatening condition or event AFTER THE 15TH CLASS DAY of the semester that prevents the student from completing the term;
- has unexpectedly been called to Active Military Duty/Training and cannot complete the term; OR
- cannot complete the term because of an institutional caused circumstance or event.

Appropriate documentation is required to support the Hardship. Hardship Petitions will need to be filed within 30 days of the end of term for which the Hardship is being requested unless there are substantial mitigating circumstances preventing the timely submission of the Hardship Petition. The Hardship Petition can be obtained by contacting Business Services at (406) 243-2223 during normal business hours, Monday Friday, 8:00 a.m. 5:00 p.m. and excluding office closures for holidays.

Return of Title IV Funds (Federal Financial Aid)

The University of Montana Refund Policy exists for calculating the amount of the federal financial aid that is subject to return when a student officially or unofficially withdraws on or before the 60% point of the term for which the aid was or could have been disbursed. 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 officially or unofficially withdraws. The University of Montana is required to return the Title IV funds to the federal government, U.S. Department of Education, within 45 days of determining the student is no longer attending. A student s official or unofficial withdrawal date is determined by:

- the date the student began the institution s withdrawal process or officially notified the institution of intent to withdraw;
- the midpoint of the period for a student who leaves without notifying the institution (unofficial);
- or, the last date of attendance by the student at a documented academically related activity.

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, Iraq/Afghanistan Service Grant, Federal Supplemental Educational Opportunity Grant (SEOG), Federal Perkins Loan, Federal Direct Loan (subsidized or unsubsidized), or Federal Parent or Graduate PLUS loans for students who officially or unofficially withdraw 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 (based 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, any credit balances on a student s account will be first applied to satisfy outstanding University tuition, fees, and institutional charges, then to any Grant overpayments and finally any remaining credit balances will then be refunded to the student.

If you officially or unofficially 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. A post-withdrawal disbursement may be made if a student shows eligibility for Title IV aid. 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 OR CEASING TO ATTEND.

Distribution Priority for Return of Title IV Funds

1. Federal Unsubsidized Stafford Loan
2. Federal Subsidized 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. Federal TEACH Grant
9. Federal Iraq/Afghanistan Service Grant
10. State, Private, or Institutional Aid
11. The Student

Other Costs and Policies

Late Registration

A student who does not complete registration, including payment of tuition & fees, by the seventh class day is assessed a late registration fee of $80.00. An additional late registration fee is assessed on the 16th class day if the registration bill is not paid. After the fifteenth class day, a petition is required to register and, if approved, the total late registration fee of $160.00 is assessed.

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. If the student s registration is cancelled, the student will be required to re-register and may be subject to the late registration fees in addition to the $25.00 service charge.

Fee Policy on Drop/Adds

Students must pay for all courses for which they are enrolled upon assessment of their registration bill. 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 that increase credit hour enrollment may result in additional tuition and fees charges. 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.

University Of Montana

Deferred Payment Plan

The University of Montana offers a payment plan to help students and their families pay their tuition, mandatory fees, and room and board. Eligibility is based on the following criteria:

- Making payments as scheduled.
- Existing credit history with the University.
- Full completion, approval and signing 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 the registration bill assessment.

The remaining three payments are due as follows:

Fall Term October 1, November 1 and December 1

Spring Term March 1, April 1 and May 1

If the first falls on a weekend or a holiday, the payment is due on the next business day. A $15.50 fee will be assessed each time a payment is late.

Registration, tuition and mandatory fees less any Financial Aid may be deferred. Student insurance and non-mandatory/course fees may not be deferred. A $15.00 fee will be assessed each time a payment is late.

Deferred Payment Plan (DPP) applications are to 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 three (3) business days and you will be notified via your UM email on the status of your application.

The signing and adherence to the terms and conditions of a promissory note will be required.Any person who is receiving financial aid that fully covers their tuition, mandatory fees and room and board; who owes the University any fees, fines, loans or other charges; or who has previously been approved for the Deferred Payment Plan and failed to make timely payments may be determined to be to be ineligible to use the Deferred Payment Plan.

This plan is not available for the summer session.

Monthly Bill Statements

Monthly bill statements are mailed on accounts that do not have an active UM email. An electronic notification will be e-mailed to the student s 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 not to exceed ten percent (10%) per annum 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
3. 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 ten percent (10%) per annum (.027% per day) on the balance due from the day after the due date until the full amount has been paid. student may also be subject to any attorney's fees or other costs or charges necessary for the collection of the amount owed may and this amount may be added to the balance due. The University of Montana also reserves the right to use the Montana State Department of Revenue to offset and receive any funds that may be refunded by the State of Montana to the student. The University of Montana reserves the right to refer unpaid accounts to third-party collection agents under contract with the University of Montana.

Determination of In-State Fee Status

Please see the Residency Information website.

Costs of On-Campus Services

Housing and Dining Services

Students living in UM Housing are required to contract for a meal plan with UM Dining. 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. For more information and charges, see the UM Housing Office website and UM Dining website.

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.

More information can be found at the UM Police parking web page.

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 in the Financial Aid Office, located on the second floor of the Lommasson Center Building .

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.

All Students

Enrollment Services-Financial Aid
Emma B. Lommasson Center, 32 Campus Drive
Missoula, MT 59812-1254
(406)243-5373
Fax (406) 243-4930

The offices is 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.

University Of Montana

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.

Organizations < University of Montana

Organizations

Alumni Association

The University of Montana Alumni Association, established in 1901 by Eloise Knowles, represents more than 85,000 graduates, former students, and friends around 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 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) Student Government

Associated Students of the University of Montana (ASUM) Student Government

The Associated Students of the University of Montana is the recognized representative body for both undergraduate and graduate students at the University of Montana. Through ASUM, UM students can voice their opinions and concerns, establish new programs and services for the benefit of all UM students, volunteer on a variety of influential committees, and fund almost 200 student groups on campus. As the only elected, legitimate voice for all UM students, the ASUM Senate meets weekly to discuss topics and find solutions to issues pertinent to students at UM. ASUM offers a variety of beneficial services to students that have paid the student activity fee, and works in the best interest of all UM students. For more information, please contact ASUM at 243-2451, check out the ASUM website, or stop by the ASUM office at UC 104.

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 to 6 years old. The program provides referrals to private residences providing child care for children ages new born to 12 years 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 and Missoula College. 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 and a Rate Your Landlord Application located on the agency website. The Renter Center also runs the Neighborhood Ambassador Program, which works to improve the quality of life in the neighborhoods surrounding the UM campus by bridging the communication gap between student renters and permanent residents. 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 118.

ASUM Transportation

The ASUM Office of Transportation promotes and provides transportation options to the University of Montana campus community. Getting to campus and finding a parking space can be frustrating and expensive, and the Office of Transportation offers several convenient alternatives. The UDASH bus operates 3 daytime transit routes:

- from UM to ride lots and student housing at South Campus every 5-10 minutes (Red Line);
- between Missoula College and UM every 15 minutes (Blue Line); and
- between Russell and Wyoming Streets and UM via 5th and 6th Streets every 30 minutes (Purple Line).

UDASH also operates late night bus service between downtown, UM, and South Campus student housing with service every 15-30 minutes (Gold Line). The Office of Transportation also provides information and personalized trip planning for Mountain Line, Missoula s city bus. Both bus services are free and open to the public.

In addition to bus service, the Office of Transportation provides interest-free bike loans up to $1,000 for 18 months, bike repair stations around campus, bike tune-up classes and events, and low-cost semester-long bike rentals. The office also operates the Yellow UBike program offering free-two day bike checkouts through the Mansfield Library.

More information is available on the Office of Transportation website, by phone at 243-4599, or in person in 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 406-243-5431, 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 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 Student Groups website or stopping by the ASUM office at UC 105.

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 it is printed on Wednesdays during the fall and spring semesters. The Kaimin website is updated daily during fall and springe semesters. For more information and past editions, please contact us at (406) 243-6646, through the Montana Kaimin website, or at our offices in Don Anderson Hall, 208.

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 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.

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.

Community Services < University of Montana

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 Montana Cooperative Wildlife Research Unit performs research designed to address the needs of cooperators, bridging the gap between applied and basic wildlife science. Our studies provide new insights useful to management and conservation, based on understanding the ecological mechanisms that underlie habitat requirements and demography of individual and coexisting wildlife species. Research emphases within the Unit include

- ecology and management of carnivores,
- applied landscape ecology,
- management of large game,
- interactions between forest management and wildlife,
- environmental influences (predators, habitat, ungulates) on demography and diversity of birds,
- habitat requirements and community ecology of birds, and
- comparative demography and life history strategies of birds in differing environmental and geographical contexts.

Other research topics are addressed as needed, in keeping with the Cooperative Research Program's mission to best meet the needs of the cooperators by remaining flexible and open to new areas of inquiry. When Cooperator's needs occur outside Unit expertise, the assistance of appropriate University faculty will be recruited.

Unit staff will advance the training and education of graduate students at the University of Montana by teaching up to one graduate-level course per year in wildlife science, chairing graduate committees of Unit students, and serving on graduate committees of non-Unit students. Technical support and training will be provided to Cooperators and other agencies as the need exists.

Objectives of Coop Units

- Conduct research into the ecology of renewable natural resources, and to investigate the production, utilization, management, protection, and restoration of such resources. This research will be relevant to the needs of the State, the geographical region, and the Nation.
- Provide technical and professional education on the graduate and professional levels, in the fields of renewable natural resource sciences.
- Make available to resource managers, land owners, other researchers, and other interested public, such facts, methods, literature, and new findings discovered through research.
- To disseminate research findings through the publication of reports, bulletins, circulars, films, and journal and magazine articles.

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 Scholarship

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 cultivate civic competency through curricular and community-based experiences. We accomplish this by collaborating to build networks of reciprocity and partnership between campus and community, engaging people in service to connect people to place to provide for engaged participation in a democratic society, and enriching student learning and scholarly pursuits. 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, and can be reached at (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, Alternative Breaks, Adopt-A-Family and more. The OCE hosts the Volunteer Fair each semester to connect students with local nonprofit organizations and volunteer opportunities.
- Pathways of Service Leadership Program - This new program is designed to develop students as leaders through an inclusive process that revolves around service as the vehicle for leadership development and social change in preparation for social impact careers after graduation.
- AmeriCorps* VISTA - The OCE provides students and recent graduates with the opportunity to engage in national service.
- 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, and serves as the primary advising office for MPA students in the nonprofit administration track.
- 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 national Certified Nonprofit Professional (CNP) 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.

The Clinical Psychology Center

The Clinical Psychology Center (CPC) is operated by the Department of Psychology at the University of Montana. The CPC provides confidential assessment, consultation, intervention, and psychotherapy services. We are able to support children, adolescents, adults, couples, families, and groups.

The CPC is a training clinic, staffed by doctoral students in Clinical Psychology and School Psychology. Although we are located on the University of Montana campus, the CPC serves the entire Missoula community. Our services are provided by student clinicians under direct supervision of licensed clinicians from the Department of Psychology faculty.

You may contact the clinic at (406) 243-2367 or by email at CPCFrontDesk@mso.umt.edu. For more information, visit the Clinical Psychology Center website.

UM Physical Therapy Clinic

The Nora Staael Evert Physical Therapy Clinic at the University of Montana provides services that include physical therapy and wellness to University of Montana students, faculty, and staff and active individuals of all ages in the community. In addition to physical therapy services, the UMPT Clinic also provides physical therapy and fitness programs for people with physical limitations, disabilities, and chronic illnesses. Programs and services include neurology and chronic disease PT services, sports and orthopedic PT services, and the New Directions Wellness Center.

For more information, you may contact the clinic at (406) 243-4006 or visit the offices in the Skaggs Building, room 129.

Student Services

UM Housing/UM Dining

UM Housing

The University of Montana-Missoula residence halls are a part of the University and Missoula communities. The campus is a center for educational, cultural, and social activities. Residing in UM housing places the student at the center of these activities. Our mission is to provide safe, clean, healthy and affordable living and learning facilities that foster 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 2,300 students in nine residence halls on campus. The residence halls staff is made up of resourceful 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 Montana Board of Regents 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 living in the residence halls for two semesters or until the student earns 30 semester credits. Any student who moves in to the residence halls at the beginning of the semester is required to reside in the residence halls for the entire semester. Students must be enrolled for at least seven credits to be eligible to live in a residence hall unless they have prior approval from the Director of UM Housing. Exceptions to residence hall living may be made for students who reside with a family member 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 UM Housing. Students are not released from the residency requirements until they receive an official notification from the Director of UM Housing. Students who have earned 30 semester credits or more are not subject to the residency requirements, but are encouraged to live on campus. Housing in the residence halls is assigned on an Academic Year basis, including Fall Semester and Spring Semester. Students requesting to move out during the semester or at the end of Fall Semester must be approved. Housing is available for Spring Semester only for newly admitted students for Spring Semester. All students living in the residence halls are required to contract for one of the on-campus meal plans with UM Dining.

Rooms in residence halls are assigned in order of application completion. The residence halls application is accompanied by a $225.00 fee. $25.00 is a non-refundable processing fee, and $200.00 is a prepayment for housing. Application forms, cancellation policies, and additional information may be obtained from the UM Housing Office website.

UM Disability Services for Students and UM Housing work together to ensure that students with disabilities can participate in all UM Housing programs. If you have a disability and will need to request reasonable modifications for housing, please indicate the type of modifications you are requesting on the housing application and contact Disability Services for Students. Medical documentation may be required. Please note that timely housing applications and requests for accessibility are critical if you wish to have accessible housing when you arrive on campus. To contact Disability Services for Students, please call 406-243-2243.

Lewis & Clark Village

(Upperclass and Graduate Housing)

Lewis & Clark Village offers two and three-bedroom apartments designated for single students without dependents at the University of Montana who will have accumulated at least 60 credit hours by the time they move into the apartments. Lewis & Clark Village is also available to single students who have acquired 30-59 credits and have a 3.0+ GPA with no prior conduct. 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 the 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, UM Housing will assign roommates based on like gender. As space allows, we will attempt to take in to consideration other living preferences such as age, smoking, alcohol tolerance, and length of agreement.

Applications for the Lewis & Clark Village are available from the UM Housing website. Your application must be accompanied by $375.00, $25.00 of which is a non-refundable processing fee, and $350.00 of which is a security deposit.

A complete set of policies, photos, and a site map are available on the UM Housing website.

University Villages

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. University Villages consists of three villages with units ranging from studio to four-bedroom apartments.

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 $350.00 security deposit must be submitted when an apartment is assigned. The security 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 security deposit is forfeited if the student cancels after accepting the assigned apartment.

Due to the demand for University Villages housing, applications for University Villages should be submitted well in advance before the desired move-in date. Applications mus be accompanied by a $25.00 non-refundable processing fee. To apply for University Villages or for additional information on eligibility and policies, visit the UM Housing website.

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.

UM Dining

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, Food Course in the UC, the Corner Store, The Market, Pizza Hut, the Iron Griz, La Peak, Biz Buzz, Think Tank, Sidebar, and Recess. All University Dining Services and Jus Chilln' locations accept cash, checks, Visa/Mastercard, UMoney and appropriate meal plans.

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.

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 Student Employment website.

Testing Services

The Office of Testing Services is a member of the National College Testing Association and Consortium of College Testing Centers and is recognized as a NCTA certified test center. 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 (CPA, PRAXIS, NREMT, PTCE, DANB, MPRE, ACSM, ACE, Microsoft Office, etc.)
- Information technology certifications (CompTIA, Adobe, Cisco, Microsoft, 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 visit the UM Testing Services website.

Academic Enrichment

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 Academic Enrichment, Davidson 002; (406) 243-2815; fax (406) 243-5866; or visit the website .

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 modifications 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 modifications. To achieve equal access, Disability Services vigorously pursues the removal of informational, physical, and attitudinal barriers to all University programs.

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, by phone at (406) 243-2243 (Voice/Text), by video phone at (406) 203-0591, or or by email at dss@umontana.edu. Please visit the UM Disability Services for Students website to find details on our services.

The UM Veterans Education and Transition Services (VETS) Office

The University of Montana Veterans Education and Transition Services (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.

The Veterans Office complies with the Veterans Benefits and Transition Act of 2018 (38 USC 3679(e)). The Act states that we will not impose any penalty, including the assessment of late fees, the denial of access to classes, libraries, or other institutional facilities, or the requirement that a covered individual borrow additional funds, on any covered individual because of the individual's inability to meet his or her financial obligations to the institution due to the delayed disbursement funding from VA under chapter 31 or 33.

Contact information:

UM VETS Office
1000 E. Beckwith Avenue
veterans@umontana.edu
UM Vets Office website
406-243-2744 Phone
406-243-5444 Fax

International Students and Scholars

The office of International Students and Scholars (ISS) assumes responsibility for the general welfare of foreign students at the University of Montana from admission to gradation 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. ISS coordinates the UM Global Partner Program, a campus peer-mentioning 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. ISS manages the campus' International House, an activity center for inter-cultural events.

International Students and Scholars works closely with other service and advising offices on campus to optimize those services and their visibility to foreign students.

International Students and Scholars 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 International Student and Scholars website or contact us at global.engagement@umontana.edu

Global Engagement Office

The Global Engagement Office 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 GEO 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 GEO works with its partners to receive sponsored international students and administer their programs. The English Language Institute (ELI) department of the GEO 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 GEO 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 GEO, 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 GEO in the International Center, call (406) 243-2288, email global.engagement@umontana.edu

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 525 ITP/ 70iBT. 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. For more information, 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.

University Of Montana

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.

- Traveler's Health (Traveler's Health Services are also available to UM Faculty and Staff)
- Allergy Shots
- Appointment & Walk-In Care
- Preventive Care
- Injury & Illness
- Women s & Men s Health
- Saturday Clinic
- Lab & X-ray

Counseling

406-243-4711

Mental Health Crisis Line

800-273-TALK

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 Support Line

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.

UM Police Department

The UM Police Department is composed of the UMPD Police and UMPD-Parking Division. Both areas of UMPD work in partnership with the campus community to provide the most professional, effective public safety services possible. From parking management to crime prevention, the University of Montana Police Department is dedicated to supporting an environment which is safe and conducive to learning.

UMPD - Police

The University of Montana Police Department (UMPD) serves and protects the students, staff, faculty, and all people and property within the University of Montana campus and properties.

Both Police Dispatchers and Officers are on duty 24 hours a day, every day of the year. Our Police Officers and Dispatchers are certified and trained by the Montana Law Enforcement Academey (MLEA). UM Police Officers have the exclusive responsibility to act upon law-enforcement matters and perform police functions for the UM Main Campus and the Missoula College. UM Police Officers investigate all crimes and enforce federal, state, and local laws as well as University of Montana policies.

All sworn UMPD officers have successfully completed training at the Montana Law Enforcement Academy (MLEA) or equivalent training recognized by the Montana Peace Officer Standards and Training council. Our officers have the same authority and powers of arrest as any officer in the state. In addition to the MLEA training, UMPD officers receive additional training throughout the year.

UMPD - Parking Division

The Parking Division of UMPD is dedicated to managing a shared resource to provide the best alternatives and access to the University of Montana campus. Parking is limited. To help alleviate some of this congestion UMPD helps fund ASUM Transportation and Mountain Line Transportation. This helps provide free alternative transportation options to our students, faculty, and staff.

All surface parking lots as well as street parking require permits specific to the area from 7 a.m. to 5 p.m., Monday through Friday. Although permits are not required by UMPD after hours and on weekends, Quick Stops, Service and Delivery, and ADA spots are enforced 24 hours. Events on campus may also charge for parking after hours. **Caution: Read signs carefully.** Each surface parking lot is signed at the entrance and further restrictions are usually designated within the lot.

Visitors here for special events are advised to make arrangements with the department with which they have business prior to their visit.

For more information, visit the UM Police Department website.

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 ATMs, 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 the 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 15 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, softball, and soccer. 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.