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HOME

The University of Montana capitalizes on its unique strengths to create knowledge, provide an active learning environment for students, and offer programs and services responsive to the needs of Montanans.

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

Disclaimer

As of Thursday, June 29, 2017, the 2017-2018 catalog is available online. Final changes/preparations are continuing before we have a final catalog in the very near future. The University of Montana is updating much of the technology behind the scenes in order to better present the online catalog.

The University and its colleges and schools reserve the right to change the rules, the calendar regulating admission and registration, the instruction in and the graduation from the University and any other regulations affecting the student. The University also reserves the right to withdraw or adjust courses and programs as they appear in the catalog at any time. Please direct questions about the catalog and the information contained within to the Registrar's Office or the department offering the courses.

ACADEMICS

Academic Policies and Procedures

Academic Calendar

The Academic Calendar for the current academic year, as well as past and future years, may be found on the Academic Calendar web page (<http://www.umt.edu/provost/about/academiccalendar.aspx>).

Registration and Course Information

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 (<http://admissions.umt.edu/admissions/default.php>).

Detailed instructions regarding registration and course offerings are available on the Registrar web pages for registration information (<http://www.umt.edu/registrar/Registration/registrationinformation.php>) and course schedule information (<http://www.umt.edu/registrar/Registration/Class%20Schedules.php>).

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

Autumn & Spring Semesters

Instructional Days	Day 1-7	Day 8-15	Day 16-45	Day 46-Last Regular Class Day/ Friday Before Finals Week	After Last Regular Class Day
Add a Course	CyberBear	Course Add/Change Form with instructor signature	Course Add/Change Form with advisor ¹ and instructor signature	Course Add/Change Form with Advisor ¹ and instructor signature	Only registration errors can be corrected; use the Course Add/Change Form with instructor signature

Change a Section	CyberBear	Course Add/Change form with both instructors' signatures	Course Add/Change form with both instructors' signatures	Course Add/Change form with both instructors' signatures	Only registration errors can be corrected; use the Course Add/Change form with both instructors' signatures
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Drop a Course	CyberBear	CyberBear	Course Drop Form with advisor ¹ and instructor signature (W on transcript)	Course Drop Form with advisor ¹ , instructor and Dean's signature (WP or WF on transcript)	Not permitted
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Change to/ from Audit	CyberBear	CyberBear	Not permitted	Not permitted	Not permitted
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Change to/from CR/NCR grading, or change credits (for variable credit courses)	CyberBear	CyberBear	Course Add/Change Form with advisor ¹ and instructor signature	Course Add/Change Form with advisor ¹ and instructor signature	Not permitted
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¹ Not required for Graduate & Post-Baccalaureate students

Winter Session

Instructional Days	Day 1	Day 2-3	Day 4-8	Day 9-13	Day 14 & Beyond
Add a Course	CyberBear	Course Add/Change Form with instructor signature	Course Add/Change Form with instructor signature	Course Add/Change Form with instructor signature	Only registration errors can be corrected; use the Course Add/Change Form with instructor signature

Change a Section	CyberBear	Course Add/Change Form with both instructors' signatures	Course Add/Change Form with both instructors' signatures	Course Add/Change Form with both instructors' signatures	Only registration errors can be corrected; use the Course Add/Change Form with both instructors' signatures
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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
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Drop a Course	CyberBear	Cyberbear	Course Drop Form with instructor signature (W on transcript)	Course Drop Form with instructor and Dean's signature (WP or WF on transcript)	Not permitted
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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
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Change to/from Audit	CyberBear	Cyberbear	Not permitted	Not permitted	Not permitted
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Change to/from Audit	CyberBear	CyberBear	Not permitted	Not permitted	Not permitted
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Change to/from CR/NCR grading, or change credits (for variable credit courses)	CyberBear	Cyberbear	Course Add/Change Form with instructor signature	Course Add/Change Form with instructor signature	Not permitted
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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
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Summer Semester: 5-week Sessions

Instructional Days	Day 1-2	Day 3-5	Day 6-14	Day 15-23	Day 24 & Beyond
Add a Course	CyberBear	Summer Override & Add/Drop Form with instructor signature	Summer Override & Add/Drop Form with instructor signature	Summer Override & Add/Drop Form with instructor signature	Only registration errors can be corrected; use the Summer Override & Add/Drop Form with instructor signature

Summer Semester: 10-week Session

Instructional Days	Day 1-5	Day 6-10	Day 11-29	Day 30-47	Day 48 & Beyond
Add a Course	CyberBear	Summer Override & Add/Drop Form with instructor signature	Summer Override & Add/Drop Form with instructor signature	Summer Override & Add/Drop Form with instructor signature	Only errors can be corrected; use the Summer Override & Add/Drop Form with instructor signature

Change a Section	CyberBear	Summer Override & Add/Drop Form with both instructors' signatures	Summer Override & Add/Drop Form with both instructors' signatures	Summer Override & Add/Drop Form with both instructors' signatures	Only errors can be corrected; use the Summer Override & Add/Drop Form with both instructors' signatures
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Drop a Course	CyberBear	CyberBear	Summer Override & Add/Drop Form with instructor signature (W on transcript)	Summer Override & Add/Drop Form with instructor signature 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 (<http://www.umt.edu/registrar/calendar.php>). Please see the Business Services/Student Accounts website (<http://www.umt.edu/business-services/Students/default.php>) for information regarding how fees are impacted by dropping/adding courses, as well as the refund schedule for a complete withdrawal from the University of Montana.

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

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

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

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

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

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

During this timeframe, students must complete a paper Course Drop Form or Course Add/Change Form as well as obtain the signature of both the course instructor and student's advisor to

1. drop/add a course and/or
2. make changes of section, grading option, or credit.

The ability to change to or from audit is no longer available at this time. Completed forms must be returned to the Registrar's Office no later than close of business on the forty-fifth instructional day of a semester. A \$10.00 processing fee is charged for each drop or add. Added courses and credits may result in additional fees. There are no refunds or reductions of fees for courses dropped after the 15th day (or equivalent), and a grade of W (withdrawn) is recorded for each dropped course.

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

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

Completed forms must be returned to the 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 add. Added courses and credits may result in additional fees.

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

To petition to drop a course, a Course Drop Form must be completed, with the signature of the student's advisor, the course instructor, and the Dean of the student's major. Completed forms must be returned to the Registrar's Office no later than close of business on the Last Regular Class Day/Friday before Finals Week. 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 (p. 351) section of this catalog for links to the School of Law website, which will list the 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 (https://webprocess.umt.edu/cyberbear/uwgccneq.p_CCN_Equivalencies).

Withdrawal from the University

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

See the Expenses (p. 43) section of this catalog for fee information relating to withdrawal from The University.

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

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

When withdrawal forms are completed in the Registrar's Office, before the last two weeks of the semester, grades of W (withdrawal) are assigned. Beginning two weeks from the end of the term, students may not withdraw from the University except for very unusual circumstances, as described below.

Retroactive Withdrawals

In exceptional cases, a student may appeal for a retroactive withdrawal for a previous semester in attendance, all such appeals are reviewed by a committee. Forms and instructions are located on the Registrar's web page (<http://catalog.umt.edu/academics/policies-procedures/%20http://www.umt.edu/registrar/PDF/RetroWithdrawalPetition.pdf>).

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

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

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 Time¹: 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.)

¹ One credit of PSYX 638 per semester is equivalent to full-time enrollment for students in the Clinical Psychology Ph.D. Program. One credit of PSYX 588 (equivalent to PSYX 638) per semester is equivalent to full-time enrollment for students in the School Psychology PhD Program.

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

Maximum Credit Load

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

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

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 fees are granted to some faculty and staff members who are at least three quarter time salaried employees on the date of registration. Additional information and the necessary forms are available in the Office of Human Resource Services in the Lommasson Center.

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

The instructor has the first fifteen (15) class days of the semester to change the grading option for their course. If a change does occur from

the original published grading option, the students in the class and the Registrar's office must be notified of the change not later than the fifteenth (15) class day.

Traditional Letter Grading (A-F)

Traditional Letter Grades represent an assessment of the overall quality of work performed in a given course. A-Excellent; B-Good; C-Satisfactory; D-Poor, F-Failure. When assigning traditional letter grades, instructors may, at their discretion, utilize the symbols + or -. Use of the + or - will be limited to A-, B+, B-, C+, C-, D+, and D-. Other grade symbols used are:

- I-Incomplete;
- N-work on the course may be continued in later semesters (when work is completed, the final grade assigned applies to all semesters of the course);
- NF-no record of academic performance;
- W-withdrawal from a course or course dropped after the fifteenth instructional day;
- WP-course dropped after the forty-fifth instructional day with passing work;
- WF-course dropped after the forty-fifth instructional day with failing work;
- AUD-auditor registration. (AUD is recorded for all students who register in courses as auditors, intending to listen to the courses without earning credit or being graded. The same fees are assessed as when registering for credit. Any attendance or participation expectations are established by the instructor of the course. If attendance expectations are not met, the instructor may request a notation be placed on the student's academic record indicating attendance was not satisfactory.)

Remedial courses do not count in credits earned, nor in grade point averages, nor do they count toward graduation.

Credit/No Credit Grading (CR/NCR)

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

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

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

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

The University cautions students that many graduate and professional schools and some employers do not recognize non-traditional grades (i.e., those other than A through F) or may discriminate against students

who use the credit/no credit option for many courses. Moreover, students are cautioned that some degree programs may have different requirements regarding CR/NCR credits, as stipulated in the catalog.

No Credit Grading in Composition (CN)

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.

Incomplete Grade Policy

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

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

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

1. A mark of incomplete may be assigned students when:
 - 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 Class Schedule or via CyberBear.

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 average for graduation.

Repeating a Course

Repeat Fee Structure:

- 1st repeat - \$25.75
- 2nd repeat - \$36.05
- 3rd repeat - \$51.50

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

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

permanent record but only the last grade received is used to determine credits earned. Only the last grade received is used in calculating the grade point average.

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

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

Repeating a course in the School of Law is governed by a different policy. See the School of Law (p. 351) section of this catalog.

Credit By Examination

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

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

Undergraduate Academic Performance

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

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 Dean'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 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 (http://www.umt.edu/oss/for_faculty_staff/acadstand.php).

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

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 (<http://www.umt.edu/registrar/PDF/>

AppealofSuspension.pdf), which details eligibility criteria and appropriate procedures.

Academic Forgiveness

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

Students wishing to apply for Academic Forgiveness may obtain the form at the GrizCentral registration counter, or on the Registrar's Academic Forgiveness web page (<http://www.umt.edu/registrar/academicforgivenesspolicy.php>).

Transcript of Academic Record

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

Transcripts are usually available within two to five working days after receipt of the signed request. There is a charge for each official transcript. Payment must be received before transcripts are released.

Transcripts and other services are withheld if the student owes a debt to the University. Special handling requests require extra fees.

Students may also order an academic transcript on-line for an additional fee through the National Student Clearinghouse service. Copies ordered via this service can be delivered electronically, hard copy or direct electronic data exchange. Additional information regarding ordering options and fees may be viewed via the Registrar's Website (<http://www.umt.edu/registrar/Alumniparents/Transcripts.aspx>).

Any student who enrolled after summer semester 1991 may view his or her academic record in CyberBear (<https://cyberbear.umt.edu>)

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 (<http://www.umt.edu/registrar/PDF/ConfidentialityRequestForm.pdf>) which can be obtained from the Registrar's Office Website (<http://www.umt.edu/registrar>). 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 (<http://www.ed.gov/policy/gen/guid/fpco/ferpa>)
2. FERPA 20 USC 1232(g) (http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=browse_usc&docid=Cite:+20USC1232g)
3. 34 CFR Part 99 (<https://www.gpo.gov/fdsys/pkg/CFR-2007-title34-vol1/content-detail.html>)
4. Montana Code Annotated (http://leg.mt.gov/bills/mca_toc/20_25_5.htm)

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 (<http://www.umt.edu/vpesa>) and the University of Montana Public Safety website (<http://www.umt.edu/police>).

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 (<http://www.umt.edu/vpesa>). 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 President for Student Affairs is responsible for procedural administration of the Student Conduct Code for all general conduct. The Provost and Vice President for Academic Affairs is responsible for all academic conduct. Copies of the Student Conduct Code can be obtained from the offices of the Vice President for Student Affairs, the Provost and Vice President for Academic Affairs, Residence Life, and Associated Students of University of Montana-Missoula (ASUM). The Student Conduct Code also can be accessed on the Vice President for Student Affairs Conduct Code web page (<http://www.umt.edu/vpesa>).

Plagiarism Warning

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

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

Class Attendance/Absence Policy

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

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

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

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

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. Because of enrollment limitations, students must request a change to a program in the Missoula College by completing an application for admission and submitting it to the College. Students whose initial admission was to the Missoula College may change to a major outside the College by submitting an application for

admission to Enrollment Services-Admissions & New Student Services in the Lommasson Center.

Credits Required for a Major

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

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

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

Students in programs in the Missoula College complete requirements as listed in the Missoula College (p. 354) 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, and majors in the Schools of Business Administration, College of Visual and Performing Arts, Journalism, Law, The College of Health Professions and Biomedical Sciences and the College of Forestry and Conservation are allowed more. Students with combined majors, as opposed to two majors, are allowed to apply 75 credits in the major.

Grade Requirement

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

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

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 College of Education (p. 83) section of this catalog.

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 (<http://www.umt.edu/undergrad-advising-center>) (www.umt.edu/uac (<http://www.umt.edu/undergrad-advising-center>)).

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 (<http://www.umt.edu/undergrad-advising-center>), 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 (http://www.umt.edu/oss/for_students/tutoring.php). 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 (<http://www.umt.edu/writingcenter>) 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

For students who qualify, TRiO Student Support Services is a federally funded program offering academic support services, including one-on-one academic advising, career search and counseling (using a national career database), mentoring for Native American students, a two-credit study skills class, and tutoring at no cost. To qualify, a student must meet one of the following criteria:

- first-generation (neither parent has completed a four-year college degree),
- financial need based on family income (usually met if receiving a Pell grant), or
- a documented disability.

For more information, visit TRiO at Lommasson Center 154, call 406-243-5032, or the TRiO website (<http://www.umt.edu/trioss>).

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.

Bachelor Degree Admission – Entering Freshmen Academic Eligibility

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

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

1. Graduation from a state accredited high school.
2. Successful completion of the following College Preparatory program:
 - Four years of English.
 - Three years of math, including Algebra I, Geometry and Algebra II (or the sequential content equivalent of these courses). Students are encouraged to take a math course in their senior year.
 - Three years of social studies, including one year global studies (i.e., world history or world geography), one year American history and one year of additional course work (i.e., government, psychology, economics).
 - Two years of laboratory science. One year must be earth science, biology, chemistry, or physics; the other year can be one of those sciences or another approved college prep laboratory science.
 - Two years chosen from the following:
 - foreign language (preferably two years),
 - computer science,
 - visual and performing arts, or
 - vocational education units.
3. Students must meet one of the following admissions requirements:
 - ACT composite of 22, or
 - SAT combined score of 1540, or
 - a 2.50 cumulative grade point average, or
 - class rank in the upper half of the graduating class
 - Students whose tests or GPA are significantly below this level may be admitted on a conditional basis.
4. Students must meet a minimum Math Proficiency score of:
 - 22 on the ACT Math section or
 - 520 on the SAT Math section or
 - A score of 3 or above on the AP Calculus AB or BC Subject Exams. In lieu of the above requirement, students can complete a Rigorous High School Core that includes four years of math with grades of C or higher and three years of lab science or
 - 4 on the International Baccalaureate Calculus Exam.
5. Students must meet a minimum Writing Proficiency score of:

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

Home-Schooled Students

Information on admission requirements for home-schooled students or students who graduate from a non-accredited high school can be found at the UM admissions home school web page (<http://admissions.umt.edu/admissions/other-applicants/homeschool.php>).

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

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 (<http://admissions.umt.edu/admissions/default.php>). 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 (<http://mc.umt.edu>).

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

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 (<http://mc.umt.edu>). 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 than 24 months from the University of Montana system.

When to Apply

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

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 (http://umonline.umt.edu/distance_form.php).

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 Admissions (p. 22) section of this catalog.

Missoula College (formerly College of Technology) students must reapply for readmission at the Missoula College Registrar's Office (909 South

Avenue) or online at the UM Admissions Missoula College web page (<http://admissions.umt.edu/admissions/missoula-college>).

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 (<http://admissions.umt.edu/admissions/default.php>).

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 (p. 22) as listed in this catalog.

Former undergraduate students are not required to pay the undergraduate application fee unless they are changing from an undergraduate status to a graduate status or vice versa. The application fee is paid only once at the undergraduate level. For additional information, contact the Registrar's Office at 406-243-2939 or visit us on the Registrar's readmissions web page (<http://www.umt.edu/registrar/Alumniparents/readmission.php>).

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 (<http://admissions.umt.edu/admissions/advanced-credits/default.php>).

International Baccalaureate

The University of Montana recognizes IB achievement and grants college credit provided the University has received satisfactory scores from the International Baccalaureate Program. University policy on awarding IB

credit is available on the Admissions Advanced-Credit web page (<http://admissions.umt.edu/admissions/advanced-credits/default.php>).

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 (<http://www.umt.edu/curry-health-center>).

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 (<http://mc.umt.edu/dualenrollment>) or contact Jordan Patterson (jordan.patterson@umontana.edu), 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 (<http://www.umt.edu/academic-enrichment/national-student-exchange/default.php>).

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 (<http://admissions.umt.edu/admissions/transfer/transfer-credits.php>).

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 (<http://admissions.umt.edu/default.php>).

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 (<http://www.umt.edu/vpesa>).

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 (<http://www.umt.edu/grad>) and pay a \$60 non-refundable application fee. Deadline for submitting a graduate nondegree application is prior to the fifteenth day of classes each semester.

Graduate Nondegree Readmission

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

Graduate nondegree readmission forms can be downloaded from the Forms section of the Graduate School homepage: <http://www.umt.edu/grad/Apply/Graduate%20Nondegree%20Admission.php> graduate nondegree students applying for readmission pay a \$20 non-refundable application fee.

Graduate Degree

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

Applicants seeking graduate status must apply online at the UM Graduate School website (<http://www.umt.edu/grad>) and pay a \$60 non-refundable fee.

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

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 (<http://www.umt.edu/global-engagement/admissions/default.php>).
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:
 - a. 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.
 - b. 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.

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

- * 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 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 (p. 19) 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 (<http://admissions.umt.edu/admissions/transfer>).

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 and national 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 (<http://mus.edu/transfer/MUScore.asp>)) 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 General Education requirements, the credits for each course are rounded. For example, if a student transfers in two N-courses each worth 2.66 credits, each course counts as 3 N-credits towards the Group XI requirement. On the other hand, an L-course worth 2.49 credits does not satisfy the Group V requirement of 3 L-credits.

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. If transfer students believe a transfer course meets the approved writing course requirement defined in the Faculty Senate Writing Committee guidelines (http://www.umt.edu/facultysenate/committees/writing_committee/guidelines.php) they may petition for an exemption through the Writing Committee. These students must provide the following information to the Writing Committee. Appeal information should be submitted to the Faculty Senate Office, UH 221, camie.foos@mso.umt.edu, 243-5553.

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

Incomplete packets will not be evaluated.

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

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 (<http://admissions.umt.edu/admissions/default.php>).

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.

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. In the Missoula College, candidates for certificates and degrees must file a formal application with the Registrar's Office in the College at the beginning of the semester in which they expect to graduate.

Credits Required for a Certificate of Completion

See 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:
 - a. **Communication:** the ability to formulate and adapt messages to a variety of audiences through written, verbal, and nonverbal processes.
 - b. **Computation:** the ability to complete basic algebraic manipulations and achieve mathematical literacy.
 - c. **Human Relations:** the ability to analyze social problems and structure, ethical norms of professions and society, human behavior, or human values systems.
 - d. **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.
 - e. **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 total of 120 credits is required for graduation with a bachelor degree; except a greater number is required in teacher education programs, pharmacy, physical therapy and the Bachelor of Applied Science. See the College of Health Professions and Biomedical Sciences (p. 135) section of this catalog.

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

Upper-Division Requirement

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

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 Missoula College Certificate of Completion and Associate of Applied Science Degree

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

Requirements for the Associate of Arts Degree

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

Requirements for the First Bachelor Degree

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

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.

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

Credit Maximums

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

Category	For Bachelor Degree	For AA or AS Degree
Technical courses (course number suffix of 'T') - up to 15 technical course credits can be applied toward the minimum credit requirement for all students, except up to 20 technical course credits can be applied to the minimum course credits for students with an earned A.A.S. degree.	15-20	15-20
Career skills	0	0
Study skills courses (e.g. AASC 101, C&I 160)	2	2
Physical education activity/skills courses (e.g. DANC 325, 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 123, 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 II and Group III Symbolic Systems.

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

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

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	Credits
Group I: English Writing Skills	
1. Composition course WRIT 101 3 or 201 (ENEX 101, WTS 101, ENEX 200) or an equivalent	
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 and Cultural Studies	3
Group VII: Social Sciences	3
Group VIII: Ethics and Human Values	3
Group IX: American and European Perspectives	3
Group X: Indigenous and Global Perspectives	3
Group XI: Natural Sciences - One Natural Science course must include a laboratory experience.	6
Total	28-49¹

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 Cultural Studies, Cultural Intl Diversity (X)
ANTY 101H Anthro the Human Experience	Historical Cultural Studies, Cultural Intl Diversity (X)
ANTY 102H Intro to South S. East Asia	Historical Cultural Studies, Cultural Intl Diversity (X)
ANTY 103H Intro Latin American Studies	Historical Cultural Studies, Cultural Intl Diversity (X)
ANTY 122S Race and Minorities	Social Sciences Course (S), Democracy and Citizenship (Y)
ANTY 141H The Silk Road	Historical Cultural 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 Cultural Studies, Cultural Intl Diversity (X)
ANTY 251H Foundations of Civilization	Historical Cultural Studies, Cultural Intl Diversity (X)
ANTY 254H Arch Wonders of the World	Historical Cultural 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 Cultural Studies, Cultural Intl Diversity (X)

ARTH 200H Art of World Civilization I	Historical Cultural Studies, Cultural Intl Diversity (X)	HSTR 102H Western Civilization II	Historical Cultural Studies, Democracy and Citizenship (Y)
ARTH 201H Art of World Civilization II	Historical Cultural Studies, Democracy and Citizenship (Y)	HSTR 103H Honors Western Civilization I	Historical Cultural Studies, Democracy and Citizenship (Y)
ARTH 250L Introduction to Art Criticism	Lit Artistic Studies (L), Writing Course-Intermediate	HSTR 104H Honors Western Civilization II	Historical Cultural Studies, Democracy and Citizenship (Y)
CHMY 305E Ethics, Literature and Writing in the Sciences	Ethical Human Values Course, Writing Course-Advanced	HSTR 230H Colonial Latin America	Historical Cultural Studies, Cultural Intl Diversity (X)
CLAS 180H Env Nat in Classical World	Historical Cultural Studies, Writing Course-Intermediate	HSTR 231H Modern Latin America	Historical Cultural Studies, Cultural Intl Diversity (X)
CLAS 251L The Epic	Lit Artistic Studies (L), Writing Course-Intermediate	HSTR 241H Central Asian Cult Civ	Historical Cultural Studies, Cultural Intl Diversity (X)
CLAS 252L Greek Drama: Politics on Stage	Lit Artistic Studies (L), Writing Course-Intermediate	HSTR 301X Ancient Greek Social History	Historical Cultural Studies, Cultural Intl Diversity (X)
CSCI 215E Social Ethical Issues in CS	Ethical Human Values Course, Writing Course-Intermediate	JPNS 150H Japanese Cult Civiliz	Historical Cultural Studies, Cultural Intl Diversity (X)
CSCI 315E Computers, Ethics, and Society	Ethical Human Values Course, Writing Course-Advanced	JRNL 100H Media History and Literacy	Historical Cultural Studies, Democracy and Citizenship (Y)
DANC 360L World Dance	Lit Artistic Studies (L), Cultural Intl Diversity (X)	LIT 110L Intro to Lit	Lit Artistic Studies (L), Writing Course-Intermediate
ENST 231H Nature and Society	Historical Cultural Studies, Writing Course-Intermediate	LIT 120L Poetry	Lit Artistic Studies (L), Writing Course-Intermediate
ENST 335L The Environmental Vision	Lit Artistic Studies (L), Writing Course-Advanced	LIT 202L The Environmental Imagination	Lit Artistic Studies (L), Writing Course-Intermediate
GH 151L Introduction to Western Humanities Antiquity	Lit Artistic Studies (L), Writing Course-Intermediate	LIT 236L Literary Histories	Lit Artistic Studies (L), Writing Course-Intermediate
GH 152L Introduction to the Humanities Medieval to Modern	Lit Artistic Studies (L), Writing Course-Intermediate	LIT 246L Genres, Themes, Approaches	Lit Artistic Studies (L), Writing Course-Intermediate
GH 161H Asian Humanities	Historical Cultural Studies, Lit Artistic Studies (L)	LIT 353L Milton	Lit Artistic Studies (L), Writing Course-Advanced
GPHY 121S Human Geography	Social Sciences Course (S), Cultural Intl Diversity (X)	MCLG 100H Intro Latin American Studies	Historical Cultural Studies, Cultural Intl Diversity (X)
GPHY 141S Geography of World Regions	Social Sciences Course (S), Cultural Intl Diversity (X)	MUSI 207H World Music (equiv to 307)	Historical Cultural Studies, Cultural Intl Diversity (X)
GRMN 340L Nature and the Environment in German Literature and Film	Lit Artistic Studies (L), Democracy and Citizenship (Y)	MUSI 301H Music History I	Historical Cultural Studies, Democracy and Citizenship (Y)
GRMN 351H German Culture: Beginnings to Romanticism	Historical Cultural Studies, Writing Course-Advanced, Democracy and Citizenship (Y)	MUSI 302H Music History II	Historical Cultural Studies, Writing Course-Intermediate, Democracy and Citizenship (Y)
GRMN 352H German Culture 1900-Present	Historical Cultural Studies, Writing Course-Advanced, Democracy and Citizenship (Y)	NASX 105H Intro Native Amer Studies	Historical Cultural Studies, Cultural Intl Diversity (X)
HONR 121L Ways of Knowing	Lit Artistic Studies (L), Writing Course-Intermediate	NASX 235X Oral/Written Trads Native Amer	Lit Artistic Studies (L), Writing Course-Intermediate, Cultural Intl Diversity (X)
HONR 122E Ways of Knowing II	Ethical Human Values Course, Democracy and Citizenship (Y)	NASX 239X Nat North Amer History Art	Lit Artistic Studies (L), Cultural Intl Diversity (X)
HSTA 101H American History I	Historical Cultural Studies, Democracy and Citizenship (Y)	NASX 303E Ecol Persp in Nat Amer Trad	Ethical Human Values Course, Cultural Intl Diversity (X)
HSTA 102H American History II	Historical Cultural Studies, Democracy and Citizenship (Y)	NASX 304E Native American Beliefs/Philos	Ethical Human Values Course, Cultural Intl Diversity (X)
HSTA 103H Honors American History I	Historical Cultural Studies, Democracy and Citizenship (Y)	PHL 210E Moral Philosophy	Ethical Human Values Course, Writing Course-Intermediate
HSTA 104H Honors American History II	Historical Cultural Studies, Democracy and Citizenship (Y)	PHL 241N Hist Philosophy of Science	Historical Cultural Studies, Natural Science Course (N)
HSTR 101H Western Civilization I	Historical Cultural Studies, Democracy and Citizenship (Y)	PSCI 210S Intro to American Government	Social Sciences Course (S), Democracy and Citizenship (Y)

RLST 232H Buddhism	Historical Cultural Studies, Cultural Intl Diversity (X)
RLST 234X Hindu Religious Traditions	Historical Cultural Studies, Cultural Intl Diversity (X)
RLST 238X Japanese Religions	Historical Cultural Studies, Cultural Intl Diversity (X)
RUSS 105H Intro to Russian Culture	Historical Cultural Studies, Democracy and Citizenship (Y)
SSEA 202X Introduction to India	Historical Cultural Studies, Cultural Intl Diversity (X)
SSEA 232H Buddhism	Historical Cultural Studies, Cultural Intl Diversity (X)
THTR 101L Introduction to Theatre	Lit Artistic Studies (L), Democracy and Citizenship (Y)
THTR 330H Theatre History I	Historical Cultural 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. View details regarding this process on the transfer student admission (p. 27) page of the 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.

ANTY 310	Human Variation	3
ANTY 254H	Arch Wonders of the World	3
ARTH 250L	Introduction to Art Criticism	3
BMGT 205	Professional Business Comm	3
BMGT 212	Critical Analysis for Business	3
C&I 287	Business Communications	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
ECNS 433	Economics of the Environment	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 315	Early American Republic	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
JRNL 270	Reporting	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
LSCI 391	Special Topics	1-9
MART 300	Visions of Film	3
NASX 280	NA Studies Rsrch Theors/Mthds	3
NASX 235X	Oral/Written Trads Native Amer	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

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.

AHAT 342	Therapeutic Interventions	2
ANTY 400	History of Anthropology	3
ANTY 402	Quan Ethnographic Field Methds	3

ANTY 408	Advanced Anthro Statistics	3	JPNS 312	Jpns Lit Medieval to Mod	3
ANTY 430	Social Anthropology	3	JRNL 340	Intermediate Audio	3
ANTY 450	Archaeological Theory	3	JRNL 352	Intermediate Video Reporting and Production	3
ANTY 451	Cultural Resource Management	3	JRNL 362	Feature Writing	3
ANTY 455	Artifact Analysis	3	JRNL 370	Public Affairs Reporting	3
ARTH 350	Contemp Art and Art Criticism	3	KIN 447	Analytical & Communicative Techniques	3
ARTH 434	Latin American Art	3	LING 473	Language and Culture	3
BGEN 499	Strategic Management	3	LING 484	NA Indigenous Lang & Ling	3
BIOH 462	Principles Medical Physiology	3	LIT 300	Literary Criticism	3
CHMY 305E	Ethics, Literature and Writing in the Sciences	3	LIT 304	U.S. Writers of Color	3
CLAS 399	Capstone	3	LIT 314	The American Novel	3
COMX 347	Rhetoric Nature & Environmtlsm	3	LIT 327	Shakespeare	3
COMX 413	Comm & Conflict-Writing	3	LIT 342	Montana Writers	3
COMX 414	Comm in Personal Relationships	3	LIT 343	African American Lit	3
COMX 421	Comm in Non-Profit Organizatns	3	LIT 353L	Milton	3
COMX 422	Communication and Technology	3	LIT 376	Lit & Other Disciplines	3
COMX 424	Risk Crisis & Comm	3	LIT 494	Seminar: Lit Capstone	3
COMX 445	Rhetorical Criticism & Theory	3	M 499	Senior Thesis	1-12
COMX 447	Rhetorical Contruction of Women	3	M 429	History of Mathematics	3
COMX 449	Rhetoric of Women's Activism	3	MART 450	Topics in Film/Media Studies	3
CSCI 315E	Computers, Ethics, and Society	3	MCLG 315	Major Hispanic Authors	3
CSCI 499	Senior Thesis/Capstone	1-6	MCLG/RUSS 494	Sem in Foreign Literatures	1-3
CSD 430	Senior Capstone	3	MUSI 302H	Music History II	3
DANC 494	Junior/Senior Seminar	3	MUSI 415	Music 20th Century to Present	3
ECNS 481	Communicating Economics	3	MUSI 416	Topics in Music History	3
ECNS 488	Res Meth & Thesis Design	2	MUSI 417	Cultural Studies in Music	3
ECNS 499	Senior Thesis/Capstone	2	NASX 494	Seminar/Workshop	3
EDU 397	Methods: Teaching & Assessing	3	PHAR 550	Drug Literature Eval	3
EDEC 454	PK-3 Language Arts and Reading Methods	3	PHL 499	Senior Seminar	3
ENST 382	Environmental Law	3	PHSX 330	Communicating Physics	3
ENST 335L	The Environmental Vision	3	PSCI 400	Adv Writing in Pol Science	1
ENST 367	Environmental Politics & Policies	3	PSYX 320	Research Methods III	3
ENST 487	Globalization, Justice & Environment	3	PSYX 400	History & System in Psychology	3
GEO 320	Global Water	4	PTRM 451	Tourism & Sustainability	3
GEO 499	Senior Thesis /Capstone	3-10	PTRM 482	Wilderness & Protctd Area Mgt	3
GH 484	Novel Ancient and Modern	3	RUSS 494	Seminar in Russian Studies	1-3
GPHY 335	Water Policy	3	SOCI 438	Seminar in Crime & Deviance	3
GPHY 433	Cultural Ecology	3	SOCI 441	Capstone: Inequal and Soc Just	3
GPHY 499	senior thesis / capstone	3	SOCI 460	Capstone: Rural and Env Change	3
GRMN 351H	German Culture: Beginnings to Romanticism	3	SOCI 488	Writing for Sociology	3
GRMN 352H	German Culture 1900-Present	3	S W 300	Hum Behav & Soc Environ	3
HEE 301	Meth of Secondary HE	3	S W 310	S W Policy & Services	3
HSTA 415	The Black Radical Tradition	3	THTR 331Y	Theatre History II	3
HSTA 417	Prayer & Civil Rights	3	WGSS 363	Feminist Theory and Methods	3
HSTA 461	Research in Montana History	3	WILD 408	Advanced Fisheries	3
HSTA 471	Writing Women's Lives	3	WILD 470	Conserv of Wildlife Populatns	4
HSTR 400	Historical Research Seminar	3			
HSTR 418	Britain 1500 - 1800	3			
HSTR 437	US-Latin America Relations	3			
JPNS 311	Jpns Clasc Lit Engr Trans	3			

Group II Mathematics

Mathematical literacy implies an appreciation of the beauty of mathematics, an ability to apply mathematical reasoning, and an understanding of how mathematics and statistics are used in many arenas. Mathematical literacy may be attained through the study of the

properties of numbers, mathematical modeling, geometry, data analysis and probability, with the overarching goal of learning mathematical reasoning and problem solving.

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

1. achieving a grade of C- or better in one of the following courses which address different aspects of mathematical literacy:

M 104	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
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 Modern and Classical Languages and Literatures. 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.

ARAB

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

CHIN

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
CHIN 302	Advanced Chinese II

CSD

CSD 132 American Sign Language II 3

FRCH

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

GH

GH/MCLG 191	Special Topics (Elementary Hindi 2 sections only)	
GRMN		
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 Expression II	
GRK		
Select one of the following:		3
GRK 102	Elementary Greek II	
GRK 201	Intermediate Greek I	
GRK 202	Intermediate Greek II	
ITLN		
ITLN 102	Elementary Italian II	4
JPNS		
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	
LATN		
Select one of the following:		3
LATN 102	Elementary Latin II	
LATN 201	Intermediate Latin I	
LATN 202	Intermediate Latin II	
NASX		
NASX 142	Elementary Blackfoot II	4
RUSS		
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 Written Expr II	
SPNS		
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	
IRSH		
IRSH 101 & IRSH 102	Elementary Irish and Elementary Irish II	8

- Students may satisfy the requirement by demonstrating equivalent skill in any of these or other languages in testing administered by the Department of Modern and Classical Languages and Literature's.
- 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, 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, 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.

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
ARTZ 394A	Seminar- Environmental Drawing	3
COMX 111A	Intro to Public Speaking	3
COMX 217A	Oral Interpretation of Lit	3
CRWR 210A	Intro Fiction Workshop	3
CRWR 211A	Intro Poetry Workshop	3
CRWR 212A	Intro Nonfiction Workshop	3
CRWR 312A	Intern Nonfiction Workshop	3
DANC 100A	Introduction to Modern Dance	2
DANC 108A	Dance Forms	3
DANC 110A	Introduction to Ballet	2
DANC 115A	Introduction to Jazz Dance	2
DANC 129A	Dance Performance Lab I	1
DANC 130A	Introduction to Dance	3

DANC 160A	Dance Forms: Irish	2	ARTH 160L	Global Visual Culture	3
DANC 165A	Dance Forms: African	2	ARTH 250L	Introduction to Art Criticism	3
DANC 170A	Dance Forms: Tribal Belly	2	CHIN 313L	Chinese Poetry in Translation	3
DANC 200A	Contemporary Modern II	2	CHIN 314L	Traditiona Chinese Literature	3
DANC 210A	Ballet II	2	CLAS 155L	Survey of Greek and Roman Lit	3
DANC 215A	Jazz Dance II	2	CLAS 160L	Classical Mythology	3
DANC 220A	Creative Practice I	3	CLAS 251L	The Epic	3
DANC 229A	Dance Performance Lab II	1	CLAS 252L	Greek Drama: Politics on Stage	3
DDSN 113A	Technical Drafting	3	COMX 140L	Intro to Visual Rhetoric	3
ENST 373A	Nature Works	3	CRWR 115L	Montana Writers Live	3
JRNL 140A	Intro Radio/Audio Storytelling	3	DANC 234L	Dance in Popular Movies	3
MART 112A	Introduction to Film Editing	3	DANC 360L	World Dance	3
MART 111A	Intro to Photoshop	3	ENST 335L	The Environmental Vision	3
MUSI 102A	Performance Study	1-2	FILM 103L	Introduction to Film	3
MUSI 108A	Orchestra: UMSO	1	GH 151L	Introduction to Western Humanities Antiquity	3
MUSI 110A	Opera Theatre I	1	GH 152L	Introduction to the Humanities Medieval to Modern	3
MUSI 111A	Singing for Non-Majors	2	GH 161H	Asian Humanities	3
MUSI 112A	Choir	1	GH 327L	Gender & Sexuality in Eng Fict	3
MUSI 114A	Band: UM Concert Band	1	GH 328L	Gender Sexuality India	3
MUSI 122A	Percussion Ensemble: UM	1	GH 351L	Exploring the Humanities	3
MUSI 123A	World Percussion Ensemble	1	GRMN 322L	Survey of German Cinema	3
MUSI 131A	Jazz Ensemble I: UM Jazz Bands	1	GRMN 340L	Nature and the Environment in German Literature and Film	3
MUSI 135A	Keyboard Skills I	1	HONR 121L	Ways of Knowing	3
MUSI 136A	Keyboard Skills II	1	IRSH 345L	Literature in the Irish Lang	3
MUSI 155A	Marching: Grizzly Marchng Band	1	LIT 110L	Intro to Lit	3
MUSI 160A	Beginning Guitar	2	LIT 120L	Poetry	3
MUSI 162A	Chamber Ensembles I	1	LIT 202L	The Environmental Imagination	3
MUSI 267A	Composer's Workshop	1	LIT 236L	Literary Histories	3
MUSI 304A	Sound in the Natural World	3	LIT 246L	Genres, Themes, Approaches	3
MUST 227A	Mtn Electroacoustic Lptp Ens I	1	LIT 280L	Ecology of Literature	3
THTR 102A	Introduction to Theatre Design	3	LIT 349L	Medieval Lit	3
THTR 106A	Theat Prod I: Run Crew	1	LIT 350L	Chaucer	3
THTR 107A	Theat Prod I: Constr Crew	3	LIT 353L	Milton	3
THTR 113A	Introduction to Voice Acting	3	LIT 378L	Gay and Lesbian Studies	3
THTR 120A	Introduction to Acting I	3	MART 101L	Intro to Media Arts	3
THTR 220A	Acting I	3	MUSI 101L	Enjoyment of Music	3
THTR 239A	Creative Drama/Dance: K-8	2	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
			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

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.

THTR 235L	Dramatic Literature	3
WGSS 163L	Hist/Lit Persp Women	3

Group VI: Historical and Cultural Studies (H)

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

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

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

AAST 141H	Black: From Africa to Hip-Hop	3
AAST 208H	Discovering Africa	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 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	Intro to Rhetorical Theory	3
CSWA 262H	Islamic Civil: Classical Age	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	German Culture 1900-Present	3
HSTA 101H/103H	American History I	4
HSTA 102H/104H	American History II	4
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	Western Civilization I	4.000
101H/103H		
HSTR	Western Civilization II	4
102H/104H		
HSTR 230H	Colonial Latin America	3
HSTR 231H	Modern Latin America	3
HSTR 241H	Central Asian Cult & Civ	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
JPNS 150H	Japanese Cult & Civiliz	3
JRNL 100H	Media History and Literacy	3
MCLG 100H	Intro Latin American Studies	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/SSEA 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

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/CCS 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	Intro to Organizational Comm	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 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 Conserv Pol/Govrnance	3
PSCI 210S	Intro to American Government	3
PSCI 220S	Intro to Comparative Govt	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 275S	Gender and Society	3
WGSS 263S	Social and Political Perspectives on Women, Men, 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.

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	Research Portfolio Seminar	3
HSTR 272E	Terrorism:Viol Mod Wrld	3
HTH 475E	Legal and Ethical Issues Health and Exercise Professions	3
NASX 303E	Ecol Persp in Nat Amer Trad	3
NASX 304E	Native American Beliefs/Philos	3
NRSM 449E	Climate Change Ethics/Policy	3
PHAR 514E	Case Studies Pharm Ethics	3
NRSM 389E	Ethics Forestry & Conservation	3.000
PHL 110E	Introduction to Ethics	3
PHL 112E	Intro Ethics and Environment	3
PHL 114E	Intro to Political Ethics	3
PHL 210E	Moral Philosophy	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) - Formerly American & European

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.

ANTY 122S	Race and Minorities	3
ARTH 201H	Art of World Civilization II	3
COMX 205Y	Deliberative Democracy	3
GRMN 340L	Nature and the Environment in German Literature and Film	3
GRMN 351H	German Culture: Beginnings to Romanticism	3
GRMN 352H	German Culture 1900-Present	3
HONR 122E	Ways of Knowing II	3
HSTA 101H/103H	American History I	4
HSTA 102H/104H	American History II	4
HSTR 101H/103H	Western Civilization I	4.000
HSTR 102H/104H	Western Civilization II	4

JRNL 100H	Media History and Literacy	3	ARTH 200H	Art of World Civilization I	3
JRNL 102Y	News Literacy	3	CAS 140X	Addictions and Diversity	3
LSCI 210Y	Who Owns Culture? An Introduction to Copyright	3	CCS 103X	Intro Climate Change:Sci & Soc	3
MUSI 301H	Music History I	3	COMX 204X	International & Dvlpmnt Comm	3
MUSI 302H	Music History II	3	COMX 212X	Intro to Intercultural Com	3
PHL 101Y	Introduction to Philosophy	3	DANC 360L	World Dance	3
PHL 102Y	Topical Intro to Philosophy	3-4	ECNS 217X	Issues in Economic Development	3
PHL 261Y	History of Ancient Philosophy	3	GPHY 121S	Human Geography	3
PHL 262Y	History of Modern Philosophy	3	GPHY 141S	Geography of World Regions	3
PSCI 210S	Intro to American Government	3	GPHY 245X	The Middle East	3
PTRM 141Y	National Parks and American Culture	3	HSTR 230H	Colonial Latin America	3
RUSS 105H	Intro to Russian Culture	3	HSTR 231H	Modern Latin America	3
THTR 101L	Introduction to Theatre	3	HSTR 241H	Central Asian Cult & Civ	3
THTR 331Y	Theatre History II	3	HSTR 301X	Ancient Greek Social History	3

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

These courses foster an appreciation for diverse cultures, their histories and contemporary forms, and their 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.

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

CAS 140X	Addictions and Diversity	3	JPNS 150H	Japanese Cult & Civiliz	3
CCS 103X	Intro Climate Change:Sci & Soc	3	LING 375X	Linguistic Ecology and Language Endangerment	3
COMX 204X	International & Dvlpmnt Comm	3	MCLG 100H	Intro Latin American Studies	3
COMX 212X	Intro to Intercultural Com	3	MUSI 207H	World Music (equiv to 307)	3
DANC 360L	World Dance	3	NASX 105H	Intro Native Amer Studies	3
ECNS 217X	Issues in Economic Development	3	NASX 201X	Indian Cultr Exprssd Thru Lang	3
GPHY 121S	Human Geography	3	NASX 210X	Native Amer Sports & Games	3
GPHY 141S	Geography of World Regions	3	NASX 231X	Indig World View Perspectives	3
GPHY 245X	The Middle East	3	NASX 235X	Oral/Written Trads Native Amer	3
HSTR 230H	Colonial Latin America	3	NASX 239X	Nat North Amer History & Art	3
HSTR 231H	Modern Latin America	3	NASX 260X	Indig Community Developmnt	3
HSTR 241H	Central Asian Cult & Civ	3	NASX 303E	Ecol Persp in Nat Amer Trad	3
HSTR 301X	Ancient Greek Social History	3	NASX 304E	Native American Beliefs/Philos	3
JPNS 150H	Japanese Cult & Civiliz	3	NASX 354X	Indians of MT since Rsrvtm Era	3
LING 375X	Linguistic Ecology and Language Endangerment	3	PSCI 230X	Intro to International Rel	3
MCLG 100H	Intro Latin American Studies	3	PTRM 345X	Sustaining Human Soc & Nat Env	3-6
MUSI 207H	World Music (equiv to 307)	3	RLST/SSEA 232H	Buddhism	3
NASX 105H	Intro Native Amer Studies	3	RLST 234X	Hindu Religious Traditions	3
NASX 201X	Indian Cultr Exprssd Thru Lang	3	RLST 238X	Japanese Religions	3
NASX 210X	Native Amer Sports & Games	3	SSEA 202X	Introduction to India	3
NASX 231X	Indig World View Perspectives	3	WGSS 150X	Women's Rights and Women's Roles Around the World	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	Ecol Persp in Nat Amer Trad	3			
NASX 304E	Native American Beliefs/Philos	3			
NASX 354X	Indians of MT since Rsrvtm Era	3			
PSCI 230X	Intro to International Rel	3			
PTRM 345X	Sustaining Human Soc & Nat Env	3-6			
RLST/SSEA 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

ANTY 210N	Intro to Physical Anthropology	3
ANTY 211N	Anthropological Genetics	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
BIOE 172N	Introductory Ecology	3
BIOM 135N	Hot Spring Micb: Yellowstone	3
BIOM 250N	Microbiology for Hlth Sciences	3
BIOO 101N	Survey MT Wildlife & Habitats	3
CHMY 121N	Introduction to General Chemistry	3
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/CCS 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
CCS 108N	Climate Change	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 100N	Issues in Biology	3
SCN 175N	Integrated Physical Science I	3
WILD 105N	Wildlife & People	3

Natural Science courses with a laboratory experience

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 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
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 105N	Montana Ecosystems	3
SCN 260N	The Biology of Behavior	3

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 (<http://www.umt.edu/sell/programs/molli/default.php>) 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 (<http://www.umt.edu/sell/programs/profdev/default.php>).

Interested in Beekeeping (<http://www.umt.edu/sell/programs/bee/default.php>)? 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 (<http://www.umt.edu/summer>), Wintersession (<http://www.umt.edu/winter>), and UOnline (<http://umonline.umt.edu>). 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 (<http://www.umt.edu/sell/cps/default.php>) team that can help make your event a success.

Need meeting space? The Continuing Education Conference Center (<http://www.umt.edu/sell/meetingspace/default.php>) 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.

EXPENSES, SERVICES, ORGANIZATIONS

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 (<http://www.umt.edu/business-services>).

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 (<http://www.umt.edu/registrar/calendar.php>).

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 (<https://cyberbear.umt.edu>) account. Payments can be made online via CyberBear (<https://cyberbear.umt.edu>):

- 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 (<http://www.umt.edu/registrar/calendar.php>).

Tuition and Mandatory Fee Schedules

The tuition and mandatory fee schedules are posted on the Business Services Tuition and Fees web page (<http://www.umt.edu/business-services/Students>). 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 (<http://www.umt.edu/business-services/Students>) 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 (http://umonline.umt.edu/distance_form.php).

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 (<http://www.umt.edu/business-services/Students>). 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 (<http://www.umt.edu/business-services/Students>).

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 (<http://www.umt.edu/sell>).

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 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

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 (p. 7) 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 (<http://www.umt.edu/registrar/calendar.php>) for summer session deadlines.

Deferred Payment Plan

The University of Montana offers a payment plan to help students and their families pay their tuition, mandatory fees, 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 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 (<https://cyberbear.umt.edu>);
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 (<http://www.umt.edu/registrar/students/residencyinfo.php>).

Costs of On-Campus Services

Housing and Dining Services

Students living in University residence halls are required to contract for a meal plan with Dining Services. Room and board rates are the same for in-state and out of-state students. Occupants may select any meal plan to obtain the number of meals preferred and choose from a variety of room options.

Students who are approved to move out of the residence halls and terminate their meal plan contract will receive a prorated refund based upon the days remaining in the semester less the cancellation fee. For more information and charges, see the Residence Life Office website (<http://www.umt.edu/residencelife>) and UM Dining website (<http://www.umt.edu/dining>).

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 (<http://www.umt.edu/police/Parking>).

Veterans' Benefits for Education Assistance Under Public Law 95-202 and Public Law 815

For Veteran information visit the UM Veterans website (<http://www.umt.edu/veterans>).

Financial Aid

Financial aid services are available from two campus locations:

- the South Avenue location of the Missoula College (MC), and
- Financial Aid Station located on the second floor of the Lommasson Center Building in Griz Central.

Students specific information including the status of the student's aid application is available in CyberBear (<https://cyberbear.umt.edu>). General financial aid information including forms, policies and scholarship information is available at the Financial Aid Office website (<http://www.umt.edu/finaid>).

Missoula College Students

Enrollment Services-Financial Aid Office (<http://www.umt.edu/finaid>)
909 South Avenue West
Missoula, MT 59801
(406) 243-7886
Fax (406) 243-7901

All Students

Enrollment Services-Financial Aid (<http://www.umt.edu/finaid>)
Lommasson Center - Griz Central
Missoula, MT 59812-1254
(406)243-5373
Fax (406) 243-4930

Both offices are fully accessible.

Notice: Any policy is subject to change without advance notice if required by federal or state law, Board of Regents, or Enrollment Services-Financial Aid Office.

Acceptance to UM

Students must be accepted for admission (or readmission) to the University in a degree seeking program before financial aid requests are considered. Students accepted into non-degree categories are not eligible for any financial aid.

Presidential Leadership Scholarships

This award is open to incoming freshmen who have demonstrated high academic achievements, leadership and promise for success through their high school experiences. The award is renewable for four years

based on meeting eligibility requirements. The application is available from Enrollment Services-Admissions, the Davidson Honors College, and high school counselors in Montana. The application is also available on-line on the Davidson Honors College website (<http://www.dhc.umt.edu/prospectiveStudents/presidential-leadership-scholarship.php>). 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 (<http://www.umt.edu/finaid>). 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 (<https://fafsa.ed.gov>). 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 (<http://www.umt.edu/finaid>) 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 (<http://www.umt.edu/career>).

Non-work study student employment positions are also posted electronically at Career Services Student Employment web page (<http://www.umt.edu/career>).

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 (<http://www.umt.edu/finaid>). Select the "Maintaining eligibility" link.

Short Term Loans

Limited short term loan money may be available to registered students who are eligible and submit complete applications. Among other conditions the student must have pending financial aid that will result in a refund to the student to qualify for the loan.

Tuition Waivers

The Montana Board of Regents has authorized the waiver of tuition for certain categories of students. Applications for any of the tuition waivers listed must be made in writing to the Enrollment Services-Financial Aid Office. The request must be made prior to the start of the semester in which students expect the waiver.

Minimum academic standards are necessary to receive tuition waivers. Other requirements and limitations may apply. Contact the Enrollment Services-Financial Aid Office for application forms or more information.

Montana Veterans Tuition Waiver

- bonafide resident of the State of Montana for fee purposes
- Honorable Discharge
- at one time qualified for veterans benefits under Title 38 of the U.S. Code, but are no longer eligible
- served during a time of war as determined by the Attorney General (World War II, 12-7-41 to 9-2-45; Korean War, 6-22-50 to 1-31-55; Vietnam War, 1-1-64 to 5-7-75; or post-Vietnam world conflicts under certain conditions. Contact the Enrollment Services-Financial Aid Office for further information.)

American Indian Student Tuition Waivers

- resident of the State of Montana for one year immediately prior to enrollment at The University of Montana-Missoula
- documentation proving at least one-quarter degree blood
- meet admissions guidelines of the University
- must have financial need as determined by the Enrollment Services-Financial Aid Office
- meet satisfactory academic progress according to the standards of the Enrollment Services-Financial Aid Office

Senior Citizens Tuition Waiver

- permanent resident of the State of Montana
- 65 years of age or older

University of Montana Employees

- instate resident
- employed at least three-quarter time on the date of registration and for the entire semester
- must be after probationary employment period
- approval from department head & Human Resources every semester

Montana University System Honors Scholarship

- awarded by Board of Regents to top graduating high school seniors in Montana
- student must submit form received from the Regents to The University of Montana Enrollment Services-Financial Aid Office for activation of this waiver

Other

There are several other tuition waivers including war orphans, MUS employees' families, surviving dependents of a Montana National Guard Member, and surviving spouse or children of any Montana firefighter or peace officer killed in the line of duty. Contact the Enrollment Services-Financial Aid Office for details.

Department of Military Science

All students are afforded the opportunity to apply for two, three and four year scholarships provided by Army ROTC. The scholarships pay for all mandatory tuition and fees, a monthly stipend and \$450.00 per semester for books. The monthly stipend for scholarship students is

- \$300.00 in the freshman year;
- \$350.00 in the sophomore year;
- \$450.00 in the junior year and
- \$500.00 in the senior year.

Additional financial assistance opportunities are provided to students that are interested in joining the U.S. Army Reserve or the Montana State National Guard. These programs are referred to as the Simultaneous Membership Program, since the student is involved in the National Guard or Reserves at the same time they are involved in ROTC. These programs have financial benefits that range from \$15,000 for a two year program to \$50,000 for a four year program. These benefits are very complex and are best understood by stopping in to visit with the Military Science Enrollment Officer.

Students have the opportunity to enroll in both the basic and advance courses offered by the Department of Military Science in the College of Arts and Sciences. The Basic Course is simply the Freshman and sophomore level courses offered by Army ROTC Instructors and no financial benefits are received for enrolling unless the student is on a scholarship. The Advanced Course refers to our junior and senior level courses. All advanced course students are contracted and receive financial benefits. We welcome student involvement in Land Navigation and Drill and Conditioning courses but no benefits are provided for enrollment in these classes.

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 (<http://www.grizalum.org>) for more information.

Associated Students of the University of Montana (ASUM)

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 (<http://www.umt.edu/asum>), 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 (http://www.umt.edu/asum/asum_agencies/Childcare/default.php), 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 (https://www.umt.edu/asum/asum_agencies/New_Legal_Services/default.php), 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 (http://www.umt.edu/asum/asum_agencies/Off_Campus_Renter_Center/default.php), 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 (<http://udash.org/red>));
- between Missoula College and UM every 15 minutes (Blue Line (<http://udash.org/blue>)); and
- between Russell and Wyoming Streets and UM via 5th and 6th Streets every 30 minutes (Purple Line (<http://udash.org/purple>)).

UDASH also operates late night bus service between downtown, UM, and South Campus student housing with service every 15-30 minutes (Gold Line (<http://udash.org/gold>)). 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 U Bike program offering free-two day bike checkouts through the Mansfield Library.

More information is available on the Office of Transportation website (<http://udash.org>), by phone at 243-4599, or in person in 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 (<http://kbga.org>), 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 (<http://kbga.org>), 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 spring semesters. For more information and past editions, please contact us at (406) 243-6646, through the Montana Kaimin website (<http://www.montanakaimin.com>), 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 (<http://www.umt.edu/umproductions>), 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 (http://www.umt.edu/asum/asum_agencies/political_action.php), or stop by the ASUM office UC 105.

ASUM Student Resolution Officer

The Student Resolution Officer is your representative for handling student complaints against a faculty member or university administrator that cannot be resolved informally. The Student Resolution Office advocates for students in a three-step dispute resolution process. For more information, please contact the Resolution Officer at 406-243-5431, the ASUM Student Resolution Officer website (https://www.umt.edu/asum/asum_agencies/student_resolution_officer.php), 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 (https://www.umt.edu/asum/student_groups/default.php) or stopping by the ASUM office at UC 105.

Fraternities and Sororities

The Greek Community of The University of Montana provides a comprehensive educational, social, and living experience for members through the promotion of friendship, leadership, personal development, academics, and services to the University and the Missoula community. The Greek members donate their time and support to over 50 recognized philanthropies. Additionally, they involve themselves in a wide variety of campus leadership organizations, such as Residence Life Staff, PRO's, ASUM Senate, Advocates, Peer Advising, and Mortar Board.

The Greek system has six (6) national fraternities (Sigma Alpha Epsilon, Sigma Chi, Sigma Nu, Kappa Sigma and Sigma Phi Epsilon) and four national sororities (Alpha Phi, Delta Gamma, Kappa Alpha Theta and Kappa Kappa Gamma). Information about Greeks can be obtained in the Office of Greek Life (UC 209B), or by visiting the greek life website (<http://www.umt.edu/fsi>), 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 as 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 (<http://www.umt.edu/peace-corps>).

Services

Use the links at the lower left to navigate to pages featuring various University of Montanan services and organizations, detailed information regarding expenses, and more.

Community Services

Bureau of Business and Economic Research

The Bureau of Business and Economic Research has been providing information about Montana's state and local economies for over 60 years and is proud to be the most comprehensive economic analysis center in the state.

House on the campus of The University of Montana-Missoula, the Bureau is the research and public service branch of the School of Business Administration. On an ongoing basis, the Bureau:

- analyzes local, state, and national economies
- provides annual income, employment and population forecasts
- conducts extensive research on forest products, manufacturing, health care and Montana Kids Count
- designs and conducts comprehensive survey research at its on-site call center
- presents annual economic outlook seminars in cities throughout Montana
- publishes the award-winning Montana Business Quarterly

Montana Cooperative Wildlife Research Unit

The 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 (<http://mtcompact.org>). 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 (p. 52).

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 (p. 51) (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 (<http://www.dhc.umt.edu/oce>).

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 (<http://www.dhc.umt.edu/oce/nonprofit-studies/nonprofit-leadership-alliance.php>).

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 (<http://hs.umt.edu/psychology>).

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

Residence Life and UM Dining

Residence Halls

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 residence halls places the student at the center of these activities. Our mission is to provide safe, clean, healthy and affordable living and learning facilities that 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 Residence Life. 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 Residence Life. Students are not released from the residency requirements until they receive an official notification from the Director of Residence Life. Students who have earned 30 semester credits or more are not subject to the residency requirements, but are encouraged to live on campus. Housing in the residence halls is assigned on an Academic Year basis, including Fall Semester and Spring Semester. Students requisition 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 Residence Life Office website (<http://www.umt.edu/residencelife/default.php>).

UM Disability Services for Students and Residence Life work together to ensure that students with disabilities can participate in all Residence Life 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, the Residence Life Office 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 Residence Life Office website (<http://www.umt.edu/residencelife/default.php>). 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 Residence Life Office website (<http://www.umt.edu/residencelife/default.php>).

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 must 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 Residence Life Office website (<http://www.umt.edu/residencelife/default.php>).

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.

Dining Services

Winner of 22 international dining awards and home to nationally renowned chefs, University Dining Services (UDS) is dedicated to bringing you a variety of delicious, well-balanced meals at reasonable prices. Our extensive selection of dining options include: the Food Zoo, the Cascade Country Store, La Peak, Biz Buzz, Think Tank, Recess, Doc's Sandwiches, Garden City Greens, Soups N Such, Pizza Hut, Wing Street, Famous Dave's BBQ, Ui-Cha! (Vietnamese), Byte Me Burgers, Eson Gib Sushi, Casa Nina and two Jus Chilln' restaurants. All University Dining Services and Jus Chilln' locations accept cash, checks, Visa/Mastercard, UMoney and appropriate meal plans.

The Food Zoo, located in the Lommasson Center, is our buffet style restaurant which features an ever-changing choice of entrees, homemade soups, an extensive salad bar, daily pastas and gourmet pizzas, fresh fruits, Bear Claw Bakery desserts, cooked-to-order specials, and vegetarian and vegan options.

The Cascade Country Store, located at the west end of the Lommasson Center, boasts a bright, food-court style atmosphere with pizzas, Mexican specialties, grilled favorites and a fresh deli. Soups, salads, Bear Claw

Bakery pastries, a wide variety of grocery items, organic products, and health and beauty aids are just some of the options available. The expansive outside deck is a popular stop for many students.

La Peak, located in the Cascade Country Store, features Craven's gourmet coffee and espresso drinks, fresh crepes, breakfast sandwiches and Bear Claw Bakery goodies. The lodge-like atmosphere makes La Peak a great place to socialize with friends.

The University Center Food Court, located on the second floor of the University Center, features a contemporary, open atmosphere, and exceptional cuisine. Food choices include Pizza Hut, Garden City Greens, Soups N Such, Ui-Cha! (Vietnamese), Wing Street, Famous Dave's BBQ, Doc's Sandwiches, Eson Gib Sushi and the award winning Casa Nina.

Biz Buzz, located on the lower level of the Gallagher Business Building can help you jump start your day with a fresh cup of Craven's coffee, espresso, or Chai tea. They also serve delicious hot paninis, fresh baked pastries from Bear Claw Bakery, bagels, sandwiches, soups and salads.

The Think Tank, located above the Urey Lecture Hall, offers Liquid Planet gourmet coffee, espresso, Chai tea, Italian soda, ice-cold beverages, and grab and go items like sandwiches, soups, salads, and snacks. Whether you need that morning boost or a lunch on the go, the Think Tank has you covered.

Recess is our newest coffee shop. Located in the Phyllis J. Washington Education Building, Recess offers Liquid Planet gourmet coffee and espresso, Chai teas, bagels, Bear Claw Bakery pastries, sandwiches and Italian sodas. For a satisfying break between classes, stop by Recess.

There are two Jus Chilln' locations on the main campus. One is located on the first floor of the University Center. The other can be found at the Fitness & Recreation. Both restaurants feature Liquid Planet gourmet coffees, smoothies, baked goods and grab and go items. Enjoy delicious soups and sandwiches at the UC location.

Meal Plans

To ensure you have healthy and nutritious food options, The University of Montana requires students living in a residence hall to purchase a meal plan. A meal plan is a pre-paid purchase of meals for the entire semester. UM Dining Services offers two meal plans designed for students living on campus: the ALL CAMPUS and the LOMMASSON PLUS. Each plan provides a Weekly Meal Plan Fund designed to ensure that meals can be purchased for the entire semester. Food purchases are deducted from your Weekly Meal Plan Fund and may be used as quickly or as modestly as you choose. Weekly Meal Plan Funds reset every Sunday morning; unused Weekly Meal Plan Funds are NOT carried forward from one week to the next. For full details, visit the UM Dining Services website (<http://www.umt.edu/dining>) 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 (<http://www.umt.edu/dining>).

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 (<http://www.umt.edu/career/default.php>).

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 (<http://www.umt.edu/career/default.php>).

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 (<http://www.umt.edu/testing>).

Internship Services

The University of Montana offers internships in most disciplines. Internships can be part- or full-time, paid or unpaid, and generally run the length of an academic semester. Internships are supervised by key faculty members and allow students to work in positions related to their academic and career goals while utilizing knowledge, theory, and skills learned in the classroom. Learning objectives complemented by faculty-assigned reflective learning projects or reports distinguish and showcase internships as essential educational experiences. Internships are available locally, state-wide, and throughout the nation in various settings, including non-profit agencies, small businesses, multi-national corporations, and city, state, and federal government offices. International internships are also available, many through a partnership with IE3 Global Internships. More detailed information is available at Internship Services, Lommasson Center 154; (406) 243-2815; fax (406) 243-5866; or visit the website at: www.umt.edu/internships (<http://www.umt.edu/internships>).

Disability Services for Students

Students with disabilities can expect access at the University of Montana-Missoula. Wherever possible, the University exceeds mere compliance with the civil rights laws of Section 504 of the Rehabilitation Act, the Americans with Disabilities Act, and the Montana Human Rights Act. The University's programs are readily accessible to and usable by people with disabilities. The campus assures Program access is delivered to the maximum extent feasible and in the most integrated manner possible.

Disability Services for Students, a student affairs office, leads the University's program access efforts for students. Disability Services provides and coordinates reasonable 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 by email at dss@umontana.edu. Please visit the UM Disability Services for Students website (<http://www.umt.edu/dss>) to find details on our services.

The UM Veteran's Education and Transition Services (VETS) Office

The University of Montana's Veteran's Office has moved to the new Veteran's Education and Transition Services (VETS) location. The VETS Office is located on the Southeast corner of the Mountain Campus at 1000 E. Beckwith Avenue, where Beckwith Ave. becomes Campus Drive. The office serves all UM veterans and their family members, including those attending the Missoula College. VETS Office hours are M-F 8 a.m. - 5 p.m. Contact information:

UM VETS Office
1000 E. Beckwith Avenue
veterans@umontana.edu
UM Vets Office website (<http://www.umt.edu/veterans>)
406-243-2744 Phone
406-243-5444 Fax

Foreign Student and Scholar Services

The office of Foreign Student and Scholar Services (FSSS) assumes responsibility for the general welfare of foreign students at the University of Montana from admission to graduation and practical training. It provides direct support services, consultation, and liaison. The office assists in the reception and orientation of foreign students and helps with their integration into the University and community. It interprets immigration regulations and laws and assists students in maintaining legal status and obtaining benefits related to their visa status. Staff members provide advising for academic and personal concerns, cultural adjustment, financial problems, and other concerns that arise.

The staff works with the International Student Association and other student groups, as well as the Missoula International Friendship Program to sponsor cultural activities, a speaker's bureau, a community hospitality program for students, leadership opportunities for students, and the annual International Culture and Food Festival. FSSS coordinates the UM Global Partner Program, a campus peer-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. FSSS manages the campus' International House, an activity center for inter-cultural events.

Foreign Student and Scholar Services works closely with other service and advising offices on campus to optimize those services and their visibility to foreign students.

Foreign Student and Scholar Services prepares certificates or petitions for the Exchange visitor J-1 visa and advises foreign scholars who need to change or extend their visa status, travel temporarily out of the United States or bring dependents to this country. Finally, the office serves as liaison to federal agencies dealing with foreign student and scholar concerns, such as the US Citizenship and Immigration Service, Department of Labor, Department of State, Internal Revenue Service and Social Security Administration. For more information visit the Foreign Student and Scholar Services website (<http://www.umt.edu/global-engagement/international-student-scholars/default.php>) or contact us at fsss@umontana.edu (fsss@umontana.edu).

Office of International Programs

The Office of International Programs (OIP) promotes and provides international life-changing experiences and related educational opportunities, serving as a resource that contributes to the culture of a globally-minded community through its several different sections. The OIP is responsible for the recruitment of all international students to UM through a variety of programs including Study Abroad, Partner Programs, English Language Institute, Undergraduate Pathway (UP) Program, and Full Admissions. The OIP works with its partners to receive sponsored international students and administer their programs. The English Language Institute (ELI) department of the OIP serves international students who wish to improve their English language and academic skills in order to pursue studies at UM or another higher education institution. The OIP also offers students the exciting opportunity to study abroad in one of over 50 countries through three different UM sponsored programs: Faculty-Directed Programs, Partner Universities, and International Student Exchange Programs (ISEP). Global Gateway, an innovative educational service portal within the OIP, develops partnerships with the UM campus, local schools, and community organizations that promote cultural awareness and sharing foreign cultures, traditions, and customs. For additional information, visit OIP in the International Center, call (406) 243-2288, email oiip@umontana.edu, or visit the International Programs website (<http://www.umt.edu/global-engagement>).

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 (<http://www.umt.edu/global-engagement>).

Curry Health Center

406-243-2122

Curry Health Center provides affordable, accessible, high quality, student-centered health services to University of Montana students to enhance

student learning, promote personal health and development and teach important life skills.

Curry Health Center is YOUR campus based health care center, with services designed to meet the needs of college students and the campus community.

General Information

The Curry Health Fee is paid at registration by students who enroll for seven credits or more (excluding distance only students). Students taking less than seven credits per semester may elect to pay the Health Fee at any time during the semester. The Curry Health Center provides a wide range of primary health care and health promotion services at discounted rates well below what students would generally find in the Missoula community.

Services in Wellness and Student Advocacy Resource Center (SARC) are available to all students. Services in Medical, Counseling and Dental are available only to students who pay the Curry Health Fee.

We recognize the busy nature of student schedules and seek to provide accessibility for both urgent needs and more routine care via appointments or walk-ins. We are happy to coordinate care with providers "back home" or assist with referral to community resources for problems beyond the scope of the Curry Health Center.

Medical Services

406-243-4330

Curry Health Center provides both primary health care services as well as walk-in care services to the University of Montana student population.

- 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 Academy (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 (<http://www.umt.edu/police>).

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 (<https://www.umt.edu/uc>).

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.

AFFILIATED CAMPUSES

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

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 (<http://www.mtech.edu>).

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 (<https://w.umwestern.edu>) or call (877) 683-7331.

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School of Business Administration

Christopher Shook, Dean

Klaus Uhlenbruck, Associate Dean

Homepage (<http://www.business.umt.edu>):<http://www.business.umt.edu/>

The School of Business Administration, founded in 1918, is the largest professional school at the University. All programs are accredited by AACSB International—The Association to Advance Collegiate Schools of Business, and accounting programs also hold separate AACSB accreditation.

Mission

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

The goal of the School of Business Administration's programs is to provide a broad foundation in 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. School of Business Administration graduates work in business, nonprofit, and government sectors all over the world.

Students may pursue programs of study leading to the B.S. in Business Administration with a major in any of the following areas:

- accounting (p. 65),
- finance (p. 65),
- international business (p. 70),
- management (p. 71),
- management information systems (p. 78), and
- marketing (p. 71).

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 only in the registration system and if approved by the instructor and the department chair. For additional information see the Academic Policies and Procedures (p. 7) 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. and M-Acct. programs are suited to all students regardless of undergraduate training. Further details may be obtained from the Graduate School or by specific inquiries directed to: Director of M.B.A. Program, School of Business Administration or Director of M-Acct. Program, School of Business Administration.

Foundation Program for Graduate Work in Business

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

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	Mgmt & 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 School of Business Administration also offers a series of five graduate-level courses that can substitute for the above undergraduate courses. These courses are only open to students who have already earned an undergraduate degree. For more information, please visit the University of Montana School of Business Administration Graduate School website (http://www.umt.edu/grad/Programs/Business_School.php).

Foundation Program for M.S.-B.A. Program

The M.S.-B.A. program is open to graduates of non-business undergraduate programs. The program can be completed in one year for students who have completed the following foundation courses, or the equivalent:

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 School of Business Administration M.S.-B.A. website (<http://www.business.umt.edu/programs/graduate/msba-program/default.php>).

Accounting and Finance Department

Bruce A. Costa Ph.D., 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 (p. 65)
- Bachelor of Science in Business Administration - Finance (p. 68)

Undergraduate Certificate

- Accounting Information Systems (p. 67)

Accounting B.S.

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

See the School of Business Administration (p. 64) section of the catalog for additional credit restrictions and residency requirements.

Bachelor of Science - Accounting

School of Business Admin

Degree Specific Credits: 76

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Note: At least 54 credits must be earned in Business classes (ECNS, SoBA internship courses and SoBA faculty-led study abroad courses maybe counted in OR out of Business"). A minimum GPA of 2.0 is required for these courses.

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

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

At least 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 (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

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SoBA Expressive Arts Requirement	3
SoBA Social Science Requirement	3
SoBA Ethical & Human Values Requirement	3
Total Hours	87-89

SoBA - Primary Lower Core Courses

Rule: All courses are required

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 203 and ACTG 305.

A math course and a statistics course are also required in the primary lower core. See Math Requirements and Symbolic Systems Requirements below. Math 3-4 credits, Symbolic Systems 3-4 credits, Stat is a primary lower core course.

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
WRIT 101	College Writing I	3
Total Hours		15

Minimum Required Grade: C-

SoBA Math Requirement

Rule: Students choose one course from the list below to fulfill their Math Requirement

Note: SoBA 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 does not waive this math requirement.

Select one of the following:	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-

SoBA – Secondary Lower Core Courses

Rule: All courses are required

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.

BGEN 220E	Business Ethics and Social Responsibility	3
COMX 111A	Intro to Public Speaking	3
CSCI 172	Intro to Computer Modeling	3
ECNS 202S	Principles of Macroeconomics	3
Total Hours		12

Minimum Required Grade: C-

SoBA - Upper Major Core

Rule: All courses are required

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 formally admitted to the major or minor.

BFIN 322	Business Finance	3
BGEN 361	Principles of Business Law	3
BMGT 322	Operations Management	3
BMGT 340	Mgmt & Organization Behavior	3
BMKT 325	Principles of Marketing	3
Total Hours		15

Minimum Required Grade: C-

Accounting Major Requirements

Rule: Must complete the following subcategories

Note: 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.

21 Total Credits Required

Accounting Major Requirements

Rule: All courses are required

ACTG 203	Accounting Lab	1
ACTG 305	Corporate Reporting I	3
Total Hours		4

Minimum Required Grade: C-

Accounting Major Requirements

Rule: All courses are required

ACTG 306	Corporate Reporting II	3
ACTG 321	Acct Information Systems I	3
ACTG 401	Principles of Fed Tax - Ind	3
ACTG 410	Cost/Mgmt Acct I	3
ACTG 411	Auditing I	3

ACTG 425	State & Local Gov't Acctg	2
Total Hours		17

Minimum Required Grade: C-

Accounting Major - Electives

Rule: Take 3 credits from the list below.

Note: No more than 3 credits of ACTG 498 may count towards the 120 credits required to graduate.

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

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

Select three credits from the following:		3
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		3

Minimum Required Grade: C-

SoBA - Capstone Courses

Rule: All courses are required

Note: 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.

BGEN 499	Strategic Management	3
Total Hours		3

Minimum Required Grade: C-

SoBA Upper-Division Writing Requirement

Rule: All courses are required

BGEN 499	Strategic Management	3
Total Hours		3

Minimum Required Grade: C-

SoBA Symbolic Systems Requirement

Rule: Students complete STAT 216 (preferred) or one other course from the list below to fulfill the Symbolic Systems Requirement.

Note: This is a primary lower core course. SoBA 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 SoBA major.

Select one of the following:		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-

SoBA Expressive Arts Requirement

Rule: All courses are required

Note: Students must complete this course with a C- or better prior to taking the capstones, though earlier completion is strongly encouraged.

COMX 111A	Intro to Public Speaking	3
Total Hours		3

Minimum Required Grade: C-

SoBA Social Science Requirement

Rule: All courses are required

Note: This is a primary lower core course and must be completed with a C- or better prior to a student being admitted into an upper-division SoBA major.

ECNS 201S	Principles of Microeconomics	3
Total Hours		3

Minimum Required Grade: C-

SoBA Ethical & Human Values Requirement

Rule: All courses are required

Note: Students must complete this course with a C- or better prior to taking the capstones, though earlier completion is strongly encouraged.

BGEN 220E	Business Ethics and Social Responsibility	3
Total Hours		3

Minimum Required Grade: C-

Accounting Info Systems Certificate

School of Business Admin

Degree Specific Credits: 25

Required Cumulative GPA: 3.0

Catalog Year: 2017-2018

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

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

Please meet with an AIS Certificate Advisor for assistance (see SoBA Advising for list of advisors by major).

Accounting Information Systems Certificate - Requirements

Rule: All courses are required

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

ACTG 203	Accounting Lab	1
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		22

Minimum Required Grade: C-

Accounting Information Systems Certificate - Electives

Rule: Complete 3 credits from the list below.

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

BMIS 365	Business App Development	3
or BMIS 370	Managing Information and Data	
Total Hours		3

Minimum Required Grade: C-

Finance B.S.

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

Basic Requirements for Finance Major

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

Bachelor of Science - Finance

School of Business Admin

Degree Specific Credits: 76

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Note: At least 54 credits must be earned in Business classes (ECNS, SoBA internship and SoBA 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 60 credits must be earned outside of SoBA (excluding HHP/ACT activities courses).

At least 27 credits in business 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 (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

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SoBA Expressive Arts Requirement	3
SoBA Social Science Requirement	3
SoBA Ethical & Human Values Requirement	3
Total Hours	93-95

SoBA - Primary Lower Core Courses

Rule: All courses are required

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.

A math course and a statistics course are also required as part of the primary lower core. See Math Requirements and Symbolic Systems Requirements below.

- Math 3-4 Credits
- Symbolic Systems 3-4 Credits

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
WRIT 101	College Writing I	3
Total Hours		15

Minimum Required Grade: C-

SoBA Math Requirement

Rule: Students choose one from the list below to fulfill their Math Requirement

Note: The Finance Department encourages that a student take M 162 to complete his or her math requirement to better prepare the student for a major in Finance. However, M 115, M 121, or M 151 will be accepted for students who choose not to take M 162.

SoBA 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 does not waive this math requirement.

Select one of the following:		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-

SoBA – Secondary Lower Core Courses

Rule: All courses are required

Note: All courses must be completed with a "C-" or better to satisfy BFIN 322, 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.

BGEN 220E	Business Ethics and Social Responsibility	3
COMX 111A	Intro to Public Speaking	3
CSCI 172	Intro to Computer Modeling	3
ECNS 202S	Principles of Macroeconomics	3
Total Hours		12

Minimum Required Grade: C-

SoBA - Upper Major Core

Rule: All courses are required

Note: BFIN 322 must be completed with a C or higher as a prerequisite to the finance major requirements.

All upper 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.

BFIN 322	Business Finance	3
BGEN 361	Principles of Business Law	3
BMGT 322	Operations Management	3
BMGT 340	Mgmt & Organization Behavior	3
BMKT 325	Principles of Marketing	3
Total Hours		15

Minimum Required Grade: C-

Finance Major - Requirements

Rule: All courses are required

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

BFIN 420	Investments	3
BFIN 424	Markets, Instns & Fin Engrng	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

Rule: Take 9 credits from the list below.

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

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

- ACTG 305 has a co-requisite of ACTG 203.
- Up to 3 credits of BFIN 498 can count towards the 9 credit elective requirement.

Select 9 credits from the following:		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 473	Multinational Financial Mgmt	
BFIN 498	Internship	
ECNS 301	Intermediate Micro with Calc	
ECNS 302	Intermediate Macroeconomics	
ECNS 403	Introduction to Econometrics	
Total Hours		9

Minimum Required Grade: C-

SoBA - Capstone Course**Rule:** All courses are required.**Note:** 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 capstone.

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

BGEN 499	Strategic Management	3
Total Hours		3

Minimum Required Grade: C-

SoBA Upper-Division Writing Requirement**Rule:** All courses are required

BGEN 499	Strategic Management	3
Total Hours		3

Minimum Required Grade: C-

SoBA Symbolic Systems Requirement**Rule:** Student's complete STAT 216 (preferred) or one other course from the list below to fulfill the Symbolic Systems Requirement.**Note:** This is a primary lower core course. SoBA 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 SoBA major.

Select one of the following:	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

SoBA Expressive Arts Requirement**Rule:** All courses are required**Note:** Students must complete this course with a C or better prior to taking the capstones, though earlier completion is strongly encouraged.

COMX 111A	Intro to Public Speaking	3
Total Hours		3

Minimum Required Grade: C

SoBA Social Science Requirement**Rule:** All courses are required**Note:** This is a lower primary core course and must be completed with a C or better prior to being admitted to an upper division SoBA major.

ECNS 201S	Principles of Microeconomics	3
Total Hours		3

Minimum Required Grade: C

SoBA Ethical & Human Values Requirement**Rule:** All courses are required**Note:** Students must complete this course with a C or better prior to taking the capstones, though earlier completion is strongly encouraged.

BGEN 220E	Business Ethics and Social Responsibility	3
Total Hours		3

Minimum Required Grade: C

International Business Major**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

- Bachelor of Science - International Business (p. 70)

**International Business B.S.
Bachelor of Science - International
Business****School of Business Admin****Degree Specific Credits:** 30**Required Cumulative GPA:** 2.0**Catalog Year: 2017-2018****Note:** At least 54 credits must be earned in Business classes (ECNS, SoBA internship courses and SoBA faculty-led study abroad courses may be counted in OR out of Businss). A minimum GPA of 2.0 is required for these courses.

At least 60 credits must be earned outside of SoBA (excluding HHP/ACT activities 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 (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

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Total Hours	30

International Business Major - Foreign Language Requirement

Rule: All courses are required

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 - Foreign Language Requirement

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

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

16 Total Credits Required

Minimum Required Grade: C-

International Business Major - Track Courses

Rule: Take 6 credits in approved track courses.

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

6 Total Credits Required

Minimum Required Grade: C-

Management and Marketing Department

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. (p. 70)
- Management and Entrepreneurship B.S. (p. 73)
- Marketing B.S. (p. 75)

Undergraduate Certificates

- Digital Marketing Certification (p. 71)
- Entertainment Management Certificate (p. 72)
- Entrepreneurship Certificate (p. 72)
- Sustainable Business Strategy (p. 77)

Digital Marketing Certification Certificate of Art - Digital Marketing School of Business Admin

Degree Specific Credits: 24

Required Cumulative GPA: 3.0

Catalog Year: 2017-2018

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

The 3.0 GPA requirement pertains specifically to the 24 credits listed below, not a student's cumulative GPA.

Please meet with a Digital Marketing Certificate advisor for assistance (see SoBA Advising for list of advisors by major).

Summary

Digital Marketing Certificate - Requirements	21
Digital Marketing Certificate - Electives	3
Total Hours	24

Digital Marketing Certificate - Requirements

Rule: All courses are required

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

Minimum Required Grade: C-

Digital Marketing Certificate - Electives

Rule: Take 3 credits from the list below.

Select one from the following:	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

Minimum Required Grade: C-

Entertainment Management Certificate

Certificate of Art - Entertainment Management

School of Business Admin

Degree Specific Credits: 18

Required Cumulative GPA: 3.0

Catalog Year: 2017-2018

Note: 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 so approved by the UMEM Program Director.

Summary

Entertainment Management Certificate - Requirements	9
Entertainment Management Certificate - Electives	9
Total Hours	18

Entertainment Management Certificate - Requirements

Rule: All courses are required

BMGT 401	Event Management	3
BMGT 402	Prin of Entertainment Mgmt I	3
BMGT 403	Prin of Entertainment Mgmt II	3
Total Hours		9

Minimum Required Grade: B

Entertainment Management Certificate - Electives

Rule: Take 9 credits from the list below.

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

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

Select three of the following:

BFIN 205S	Personal Finance	9
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 132L	History of Rock & Roll	
PSCI 466	Nonprofit Adm & Pub Svc	
Total Hours		9

Minimum Required Grade: B

Entrepreneurship Certificate

Certificate of Art - Entrepreneurship

School of Business Admin

Degree Specific Credits: 15

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

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

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

Summary

Entrepreneurship Certificate - Requirements	5-10
Entrepreneurship Certificate - Electives	6
Total Hours	11-16

Entrepreneurship Certificate - Requirements

Rule: All courses are required

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

Students must complete a three (3) credit 498 internship course with an entrepreneurial venture.

BMGT 448	Entrepreneurship	3
BMGT 458	Advanced Entrepreneurship	1
BMGT 498	Internship	1-6
Total Hours		5-10

Entrepreneurship Certificate - Electives

Rule: Take 6 credits from the list below

Note: The electives cannot be in the students' primary major field.

Select two of the following: 6

BFIN 301	Analysis of Finan Statements	
BMGT 420	Leadership and Motivation	
BMIS 478	E Commerce a Managerl Prspctv	
BMKT 337	Consumer Behavior	
BMKT 342	Marketing Research	
BMKT 343	Integrated Marketing Comm	
BMKT 460	Mktg Hi-Tech Prod & Innov	
Total Hours		6

Minimum Required Grade: C-

Management & Entrepreneurship B.S. Bachelor of Science - Management & Entrepreneurship

School of Business Admin

Degree Specific Credits: 76

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Note: At least 54 credits must be earned in Business classes (ECNS, SoBA internship courses, and SoBA 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 60 credits must be earned outside of SoBA (excluding HHP/ACT activities 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.

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

SoBA - Primary Lower Core Courses	21
SoBA Math Requirement	3-4
SoBA - Lower Secondary Core	12

SoBA - Upper Major Core	15
Management Major - Requirements	12
Management Major - Electives	12
SoBA - Capstone Courses	3
SoBA Upper-Division Writing Requirement	3
SoBA Symbolic Systems Requirement	4
SoBA Expressive Arts Requirement	3
SoBA Social Science Requirement	3
SoBA Ethical & Human Values Requirement	3
Total Hours	94-95

SoBA - Lower Primary Core Courses

Rule: All courses are required

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

Note: A math course and a statistics course are also required as part of the primary lower core. See Math Requirements and Symbolic Systems Requirements below.

- Math 3-4 Credits
- Symbolic Systems 3-4 Credits

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
ECNS 202S	Principles of Macroeconomics	3
WRIT 101	College Writing I	3
Total Hours		18

Minimum Required Grade: C-

SoBA - Math Requirement

Rule: Students choose one course from the list below to fulfill their Math Requirement

Note: SoBA 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 does not waive the math requirement.

Select one of the following: 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-

SoBA - Lower Secondary Core

Rule: All courses are required

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.

BGEN 220E	Business Ethics and Social Responsibility	3
COMX 111A	Intro to Public Speaking	3
CSCI 172	Intro to Computer Modeling	3
ECNS 202S	Principles of Macroeconomics	3
Total Hours		12

Minimum Required Grade: C-

SoBA - Upper Major Core

Rule: All courses are required

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

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

BFIN 322	Business Finance	3
BGEN 361	Principles of Business Law	3
BMGT 322	Operations Management	3
BMGT 340	Mgmt & Organization Behavior	3
BMKT 325	Principles of Marketing	3
Total Hours		15

Minimum Required Grade: C-

Management Major - Requirements

Rule: All courses are required

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

Rule: Take 12 credits from the list below.

Note:

- 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.

Select 12 credits from the following: 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-

SoBA - Capstone Courses

Rule: Required: BGEN 499

Note: Students must complete all lower 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.

BGEN 499	Strategic Management	3
Total Hours		3

Minimum Required Grade: C-

SoBA Upper Division Writing Requirement

Rule: All courses are required

BGEN 499	Strategic Management	3
Total Hours		3

Minimum Required Grade: C-

SoBA Symbolic Systems Requirement

Rule: Students complete STAT 216 (preferred) or one other course from the list below to fulfill the Symbolic Systems Requirement.

Note: This is a lower primary core. SoBA 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 SoBA major.

Select one of the following:	3-4
FORS 201 Forest Biometrics	
PSYX 222 Psychological Statistics	
SOCI 202 Social Statistics	
STAT 216 Introduction to Statistics (preferred)	

Total Hours	3-4
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Minimum Required Grade: C-

SoBA Expressive Arts Requirement

Rule: All courses are required

Note: Students must complete this course with a C- or better prior to taking the capstones, though earlier completion is strongly encouraged.

COMX 111A Intro to Public Speaking	3
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Total Hours	3
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Minimum Required Grade: C-

SoBA Social Science Requirement

Rule: All courses are required

Note: This is a lower primary core course and must be completed with a C- or better prior to a for a student being admitted into an upper-division SoBA major.

ECNS 201S Principles of Microeconomics	3
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Total Hours	3
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Minimum Required Grade: C-

SoBA Ethical & Human Values Requirement

Rule: All courses are required

Note: Students must complete this course with a C- or better prior to taking the capstones, though earlier completion is strongly encouraged.

BGEN 220E Business Ethics and Social Responsibility	3
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Total Hours	3
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Minimum Required Grade: C-

Marketing B.S.

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

Bachelor of Science - Marketing

School of Business Admin

Degree Specific Credits: 76

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Note: At least 54 credits must be earned in Business classes (ECNS, Soba internship course and SoBA 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 60 credits must be earned outside of SoBA (excluding HHP/ACT activities 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 (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

SoBA - Primary Lower Core Courses	21
SoBA Math Requirement	3-4
SoBA - Secondary Lower Core Courses	12
SoBA - Upper Major Core	15
Marketing Major - Requirements	15
Marketing Major - Electives	9
SoBA - Capstone Courses	3
SoBA Upper-Division Writing Requirement	3
SoBA Symbolic Systems Requirement	3-4
SoBA Expressive Arts Requirement	3
SoBA Social Science Requirement	3
SoBA Ethical & Human Values Requirement	3
Total Hours	93-95

SoBA - Primary Lower Core Courses

Rule: All courses are required

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

Note: A math course and a statistics course are also required in the primary lower core. See Math Requirements and Symbolic Systems Requirements below.

- Math 3-4 Credits
- Symbolic Systems 3-4 Credits

ACTG 201	Principles of Financial Accounting	3
ACTG 202	Principles of Managerial Accounting	3
BMIS 270	MIS Foundations for Business	3
ECNS 202S	Principles of Macroeconomics	3
WRIT 101	College Writing I	3
Total Hours		15

Minimum Required Grade: C-

SoBA Math Requirement

Rule: Students choose one course from the list below to fulfill their Math Requirement

Note: SoBA 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 does not waive this math requirement.

Select one of the following:	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-

SoBA – Secondary Lower Core Courses

Rule: All courses are required

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.

BGEN 220E	Business Ethics and Social Responsibility	3
COMX 111A	Intro to Public Speaking	3
CSCI 172	Intro to Computer Modeling	3
ECNS 202S	Principles of Macroeconomics	3
Total Hours		12

Minimum Required Grade: C-

SoBA - Upper Major Core

Rule: All courses are required

Note: All upper major core courses must be completed before the capstone can be taken.

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

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.

BFIN 322	Business Finance	3
BGEN 361	Principles of Business Law	3
BMGT 322	Operations Management	3
BMGT 340	Mgmt & Organization Behavior	3
BMKT 325	Principles of Marketing	3
Total Hours		15

Minimum Required Grade: C-

Marketing Major - Requirements

Rule: All courses are required

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

Rule: Take 9 credits from the list below. At least 3 of these credits must come from BMKT 440, BMKT 460 or BMKT 491.

Note:

- Up to 6 credits of BMGT 493 can count towards the 9 credit elective requirement.
- Up to 6 credits of BMKT 491 can count towards the 9 credit elective requirement.
- Up to 6 credits of BMKT 494 can count towards the 9 credit elective requirement.
- Up to 3 credits of BMKT 498 can count towards the 9 credit elective requirement.

Select at least 3 credits from the following:	3
BMKT 440	Marketing Analytics
BMKT 460	Mktg Hi-Tech Prod & Innov
BMKT 491	Special Topics

Select 6 credits from the following: 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-

SoBA - Capstone Courses

Rule: All courses are required

Note: Students must complete all lower and upper core and their prerequisites and have an approved graduation application to register for their capstone.

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.

BGEN 499	Strategic Management	3
Total Hours		3

Minimum Required Grade: C-

SoBA Upper-Division Writing Requirement

Rule: All courses are required

BGEN 499	Strategic Management	3
Total Hours		3

Minimum Required Grade: C-

SoBA Symbolic Systems Requirement

Rule: Students complete STAT 216 (preferred) or one other course from the list below to fulfill the Symbolic Systems Requirement.

Note: This is a lower primary core course. SoBA 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 SoBA major.

Select one of the following:		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-

SoBA Expressive Arts Requirement

Rule: All courses are required

Note: Students must complete this course with a C- or better prior to taking the capstones, though earlier completion is strongly encouraged.

COMX 111A	Intro to Public Speaking	3
Total Hours		3

Minimum Required Grade: C-

SoBA Social Science Requirement

Rule: All courses are required

Note: This is a primary lower core course and must be completed with a C- or better prior to being admitted into an upper-division SoBA major.

ECNS 201S	Principles of Microeconomics	3
Total Hours		3

Minimum Required Grade: C-

SoBA Ethical & Human Values Requirement

Rule: All courses are required

Note: Students must complete this course with a C- or better prior to taking the capstones, though earlier completion is strongly encouraged.

BGEN 220E	Business Ethics and Social Responsibility	3
Total Hours		3

Minimum Required Grade: C-

Sustainable Business Strategy Certificate

Certificate of Art - Sustainable Business Strategy

School of Business Admin

Degree Specific Credits: 12

Required Cumulative GPA: 3.0

Catalog Year: 2017-2018

Note: 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 SoBA Advising for list of advisors by major).

Summary

SBSC Required Courses	6
SBSC Elective Courses	6
Total Hours	12

SBSC Required Courses

Rule: All courses are required

BGEN 445	Sustainability Reporting	3
BMGT 410	Sustainable Business Practices	3
Total Hours		6

Minimum Required Grade: C-

SBSC Elective Courses

Rule: Must choose 2

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.

Select two of the following: 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 408	Global Cycles and Climate	
NRSM 449E	Climate Change Ethics/Policy	
NRSM 475	Environment & Development	
Total Hours		6

Minimum Required Grade: C-

Management Information Systems Department

Clay 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 managing the flows of information within and across the organization's business processes;
2. effectively managing the acquisition and utilization of information technology; and
3. using both information and information technology to enhance the organization's strategic advantage.

The knowledge and skills developed in the curriculum lead to careers in consulting, application development, systems analysis and design,

database administration, electronic commerce, telecommunications, network security management, big data analytics 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. (p. 79)

Undergraduate Minors

- Business Administration Minor (p. 78)

Undergraduate Certificates

- Certificate in Big Data Analytics (p. 79)

Business Administration Minor Minor - Business Administration School of Business Admin

Degree Specific Credits: 27

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Summary

Primary Lower Core Courses	16
Upper Minor Core	12
Total Hours	28

Primary Lower Core Courses

Rule: Must complete all of the following courses:

Note: 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.

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
Total Hours		16

Minimum Required Grade: C-

Upper Minor Core

Rule: Must complete all of the following courses:

Note: 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.

BFIN 322	Business Finance	3
BGEN 361	Principles of Business Law	3
BMGT 340	Mgmt & Organization Behavior	3
BMKT 325	Principles of Marketing	3
Total Hours		12

Minimum Required Grade: C-

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.

Certificate - Big Data Analytics

School of Business Admin

Degree Specific Credits: 12

Required Cumulative GPA: 3.0

Catalog Year: 2017-2018

Note: All students pursuing a BDA Certificate must also complete the degree requirements for a UM major.

The 3.0 GPA requirement pertains specifically to the 12 credits required for this certificate, not a student's cumulative GPA.

Please meet with an BDA Certificate Advisor for assistance (Computer Science and Mathematics majors contact their department; all others contact SOBA Advising).

Complete the BDA certificate application (available from the SOBA advising office).

Summary

Big Data Analytics Certificate - Foundational Course	3
Big Data Analytics Certificate – Elective Courses	6
Big Data Analytics Certificate – Capstone Course	3
Total Hours	12

Big Data Analytics Certificate - Foundational Course

Rule: Take the following course.

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

BMIS 326	Introduction to Data Analytics	3
Total Hours		3

Minimum Required Grade: C-

Big Data Analytics Certificate – Elective Courses

Rule: Take 6 credits from the list below.

Select two from the following:		6
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	Practical Big Data Analytics	
M 462	Theoretical Basics of Big Data Analytics and Real Time Computation Algorithms	
Total Hours		6

Minimum Required Grade: C-

Big Data Analytics Certificate – Capstone Course

Rule: Take one of the following two courses.

BMIS 482	Big Data Project	3
or M 467	Big Data Analytic Projects	
Total Hours		3

Minimum Required Grade: C-

Management Information Systems B.S.

Bachelor of Science - Management Information Systems

School of Business Admin

Degree Specific Credits: 76

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Note: At least 54 credits must be earned in Business classes (ECNS, SoBA internship courses and SoBA 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 60 credits must be earned outside of SoBA (excluding HHP/ACT activities 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 (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

SoBA - Primary Lower Core Courses	21
SoBA Math Requirement	3-4
SoBA – Secondary Lower Core Courses	12
SoBA - Upper Major Core	15
Management Information Systems - Requirements	16-21
Management Information Systems - Electives	6
SoBA - Capstone Courses	3
SoBA Upper-Division Writing Requirement	3
SoBA Symbolic Systems Requirement	3-4
SoBA Expressive Arts Requirement	3
SoBA Social Science Requirement	3
SoBA Ethical & Human Values Requirement	3
Total Hours	91-98

SoBA - Primary Lower Core Courses

Rule: All courses are required

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.

A math course and a statistics course are also required in the primary lower core. See Math Requirements and Symbolic Systems Requirements below.

- Math 3-4 Credits
- Symbolic Systems 3-4 Credits

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
WRIT 101	College Writing I	3
Total Hours		15

Minimum Required Grade: C-

SoBA Math Requirement

Rule: Students choose one course from the list below to fulfill their Math Requirement

Note: SoBA 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 does not waive this requirement.

Select one of the following:		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-

SoBA – Secondary Lower Core Courses

Rule: All courses are required

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.

BGEN 220E	Business Ethics and Social Responsibility	3
COMX 111A	Intro to Public Speaking	3
CSCI 172	Intro to Computer Modeling	3
ECNS 202S	Principles of Macroeconomics	3
Total Hours		12

Minimum Required Grade: C-

SoBA - Upper Major Core

Rule: All courses are required

Note: 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.

BFIN 322	Business Finance	3
BGEN 361	Principles of Business Law	3
BMGT 322	Operations Management	3
BMGT 340	Mgmt & Organization Behavior	3
BMKT 325	Principles of Marketing	3
Total Hours		15

Minimum Required Grade: C-

Management Information Systems - Requirements

Rule: All courses are required

Note: BMIS 365, BMIS 370, and BMIS 476 must be taken at UM.

3 credits of BMIS 498 are required to graduate.

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	1-6
Total Hours		16-21

Minimum Required Grade: C-

Management Information Systems - Electives

Rule: Take 6 credits from the list below.

Note: Students taking ACTG 321 for an elective must also take the ACTG 203 co requisite course.

Select 6 credits from the following:		6
ACTG 321	Acct Information Systems I	
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 482	Big Data Project	
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	Practical Big Data Analytics	
STAT 451	Statistical Methods I	
Total Hours		6

Minimum Required Grade: C-

SoBA - Capstone Courses

Rule: All courses are required

Note: Students must complete all lower 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.

BGEN 499	Strategic Management	3
Total Hours		3

Minimum Required Grade: C-

SoBA Upper-Division Writing Requirement

Rule: All courses are required

BGEN 499	Strategic Management	3
Total Hours		3

Minimum Required Grade: C-

SoBA Symbolic Systems Requirement

Rule: Students complete STAT 216 (preferred) or one other course from the list below to fulfill the Symbolic Systems Requirement.

Note: This is a primary lower core course. SoBA 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 SoBA major.

Select one of the following:		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-

SoBA Expressive Arts Requirement

Rule: All courses are required

Note: Students must complete this course with a C- or better prior to taking the capstones, though earlier completion is strongly encouraged.

COMX 111A	Intro to Public Speaking	3
Total Hours		3

Minimum Required Grade: C-

SoBA Social Science Requirement

Rule: All courses are required

Note: This is a primary lower core course and must be completed with a C- or better prior to a student being admitted into an upper-division SoBA major.

ECNS 201S	Principles of Microeconomics	3
Total Hours		3

Minimum Required Grade: C-

SoBA Ethical & Human Values Requirement

Rule: All courses are required

Note: Students must complete this course with a C- or better prior to taking the capstones, though earlier completion is strongly encouraged.

BGEN 220E	Business Ethics and Social Responsibility	3
Total Hours		3

Minimum Required Grade: C-

Davidson Honors College

Brock Tessman, Dean

The Davidson Honors College is a campus-wide association of faculty and students united by a common concern for academic and personal excellence. Its mission is to foster intellectual and civic values, and to support the best possible teaching and learning circumstances for participating faculty and students.

The College offers an academic and social home to talented and motivated students as they pursue their undergraduate education. Students from all major areas in the College of Humanities and Sciences and the professional schools are welcome, as well as students who are undecided about a major. Honors is not a major in itself, but an enhancement to General Education in the liberal arts and sciences as well as to virtually all undergraduate majors on campus.

The Honors College building, at the center of the campus, provides a large student lounge, study rooms, classrooms and a computer center for student use. The Honors Student Association plans and conducts a variety of social and academic activities as well as community service projects throughout the year. Special Honors residence hall floors and living units are available.

The Davidson Honors College also sponsors the University of Montana Office for Civic Engagement, an office that coordinates student service activities in the community and beyond, and supports the integration of community service experience into the academic curriculum.

Curriculum

In accordance with our mission, the DHC is committed to offering students the additional resources, challenges, and encouragement to be active and collaborative learners. DHC students are expected to:

- be intellectually curious;
- develop skills in critical thinking, analytic reasoning, and problem solving;
- increase their abilities to write and speak effectively;
- acquire skills and habits of community and public service;
- develop research and life-long learning skills and habits.

Honors students are expected to pursue these student learning outcomes inside the classroom and out, in their work and their recreation, volunteer service, membership in clubs and organizations, participation in campus and civic governance, independent study, pursuit of their hobbies and interests, and formal course work.

Honors courses are limited in enrollment to 20 students and usually are conducted in a discussion or seminar format. They emphasize critical thinking, the development of written and oral communication skills, direct contact with the faculty, and use of original texts or "hands-on," participatory experience. These courses are taught by outstanding faculty selected according to their department's standards of excellence. Course offerings vary somewhat and represent many academic departments and subject areas. Honors courses often fulfill General Education and many common major requirements.

At the junior and senior level students are offered a selection of Honors seminars. These seminars are open to students from all disciplines. The aim of these seminars is to assist students in applying different methods

of inquiry and research, in using the insights of various disciplines, in integrating the students' knowledge, and in developing well-informed personal stances toward the material and issues studied.

In their senior year, students complete an Honors thesis or research project, assuming responsibility, together with a faculty mentor, for an original scholarly research or creative project. This project may coincide with a departmental requirement, and is intended to prepare students to fulfill roles of intellectual, moral, and cultural leadership as they realize their places in society.

Assessment of Personal and Academic Goals

A college education invites students to formulate goals and reflect on their progress toward attaining them. Davidson Honors College students are responsible for evaluating their aims and attainments from year to year in collaboration with an advisor. Entering students are asked to assess their abilities and resources and begin to formulate interests and aims in light of the student learning outcomes mentioned previously.

Requirements

Davidson Honors College students are required to complete a minimum of seven Honors courses, including HONR 121L and a senior Honors research project (which may be counted as one Honors course). An Honors section of *Introduction to Humanities*, GH 151L GH 152L, may be counted as equivalent to HONR 121L. HONR 120, *Introduction to Honors*, also is required of all first-year students. As this is a one-credit course, it does not count toward the seven Honors courses required to graduate. Details are available in the Davidson Honors College office or on the DHC web site at www.dhc.umt.edu (<http://www.dhc.umt.edu>).

It also is recommended that all students include in their curriculum at least one course or independent study project that includes an experience of volunteer community service or study abroad.

To maintain good standing in the Davidson Honors College, students must take at least one Honors course per year and maintain an overall cumulative grade point average of 3.0 or above. Academic progress is reviewed each semester. Students whose grades are below the 3.0 standard are given an academic warning. A student whose cumulative grade point average falls below 3.0 is placed on academic probation and remains in this status until the cumulative grade point average rises to 3.0 or higher. Suspension from the Honors College occurs when the term grade point average of a student on probation is below 3.0. A suspended student may be reinstated when the cumulative grade point average rises to 3.0 or higher.

Graduation through the Davidson Honors College requires a cumulative grade point average of 3.0 or higher, and 3.4 in the major field. Upon successful completion of the requirements, students will receive their bachelor degrees as "University Scholars" in their respective majors and have this distinction noted on their diplomas. Graduation through the Davidson Honors College is not connected with the distinctions "with honors" and "with high honors" bestowed on the recommendation of major departments according to certain grade point averages and/or on the basis of exams or other means of assessment in the senior year.

Scholarships

The Davidson Honors College administers the Presidential Leadership Scholarships for incoming freshmen, and several other scholarship programs for currently enrolled students. For further information about

these scholarship programs, contact the Honors College. Honors students and those transferring from other institutions are eligible for the general scholarship program. For further information, contact the Financial Aid Office.

Admission to the DHC

Students applying to the Davidson Honors College should show evidence of academic talent and motivation. Generally, a minimum high school GPA of 3.5 is expected, as well as an ACT score of 27 or higher, or SAT combined score of 1800. These criteria are not absolute, and highly motivated students are encouraged to apply.

Applications are particularly welcomed from older or non-traditional students and students from varied racial and ethnic backgrounds. College transfer students with a record of strong academic performance (GPA of 3.5 or higher) also are welcome to apply. *The Davidson Honors College Application for Admission* must be postmarked or submitted online by . Note that all applicants to the Davidson Honors College also must complete a separate application for admission to the University of Montana-Missoula.

Presidential Leadership Scholarships

The Presidential Leadership Scholarships are the University of Montana's premier academic scholarships, recognizing outstanding talent, academic performance, leadership, and contribution to the community. These awards are renewable for four years, subject to satisfactory performance by the student. Each scholarship includes a full or partial tuition waiver, the value of which varies according to the amount of tuition each year.

Eligible candidates for the Presidential Leadership Scholarship must be recent high school graduates who have not previously enrolled as a regular college or university student. Recent finalists for the Presidential Leadership Scholarship posted an average of 3.98 GPA, SAT combined score of 2100, and ACT composite score of 32.

All Davidson Honors College applications for admission received by 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 (dhc@mso.umt.edu)
web site: <http://www.dhc.umt.edu>

College of Education and Human Sciences

Roberta D. Evans, Dean
Susan Harper-Whalen, Associate Dean

The Phyllis J. Washington College of Education and Human Sciences is comprised of five academic departments—

- Communicative Sciences and Disorders,
- Counselor Education,
- Curriculum and Instruction,
- Educational Leadership, and
- Health and Human Performance.

It is also the home for the Institute for Educational Research and Service (IERS).

Mission: The College of Education and Human Sciences shapes professional practices that contribute to the development of human potential. We are individuals in a community of lifelong learners, guided by respect for knowledge, human dignity, and ethical behavior. We work together producing and disseminating knowledge to advance the physical, emotional, and intellectual health of a diverse society.

The College of Education and Human Sciences coordinates the University of Montana Professional Education Unit, a unit comprised of initial teacher preparation at the elementary and secondary levels, and the advanced preparation of teachers, certified speech-language pathologists, educational leaders, school counselors, and school psychologists. The Department of Communicative Sciences and Disorders prepares professionals at the master's level in speech-language pathology. The Departments of Curriculum and Instruction, Educational Leadership and Counseling Education prepare professionals for careers in education with bachelor, master's, Education Specialist and Doctor of Education programs while the School Psychology Program, housed in the Psychology Department in the College of Humanities and Sciences, prepares students for careers in education with its master's, education specialist, and doctoral degrees. These programs are organized to foster the development of learning communities and incorporate three basic themes: integration of knowledge and experience; cooperation among participants; and inclusiveness, caring, and respect for others. The Professional Education Unit at the University of Montana is accredited by the National Council for Accreditation of Teacher Education (NCATE) (<http://www.ncate.org>), <http://www.ncate.org>.

The Communicative Sciences and Disorders, Counselor Education, and Health and Human Performance Departments all prepare professionals for careers in human service professions. Via its bachelor's degree in Communicative Disorders, the Communicative Sciences and Disorders Department prepares graduates qualified to work as clinical aides in speech-language pathology or audiology. Through its master's program in Speech-Language Pathology, the department produces professional students qualified to work as speech-language pathologists in schools and clinical settings. Students pursuing the Master of Arts in Counselor Education are prepared to work in a variety of community/agency settings. Upon completion of the program, graduates are prepared to sit for the Licensed Practical Counselor or Licensed Practical Clinical Counselor examination. Via its Bachelor and Master of Science degrees, the Department of Health and Human Performance prepares students in the areas of community health, athletic training, exercise science, and health enhancement. The Athletic Training Program is accredited by the Commission on Accreditation of Athletic Training Education.

Central to its research and outreach efforts with P/K-12 schools, the College of Education and Human Sciences' Institute for Educational Research and Service (IERS) designs, evaluates, and disseminates programs that support the well-being of students and communities. Since 1957, IERS has collaborated with numerous local, state, national, and federal organizations to provide effective, data-driven research models that enhance the social development and academic achievement of all learners. Externally sponsored teaching, research, and service activities are central to IERS. In addition, the College of Education and Human Sciences supports a Preschool Laboratories, Preschool Program, Health and Human Performance Laboratory and Technology Resource Center. These programs offer enhanced opportunities for student involvement and learning.

Specific program options within the College of Education and Human Sciences are described below and in the various departmental sections of this catalog. The web address for the college (<http://www.coehs.umt.edu>) is <http://www.coehs.umt.edu>.

Communicative Science and Disorders Department

Amy Glaspey, Chair

The Bachelor of Arts Degree in Communicative Sciences and Disorders prepares students for graduate study in speech-language pathology, audiology, various education specialties, business, and health care as well as such fields as developmental and cognitive psychology. The Master of Science degree in Speech Language Pathology provides students with the foundational knowledge and clinical skills in the field of speech language pathology to work in medical and educational settings with clients across the life span.

Undergraduate

- Communicative Sciences and Disorders B.A. (p. 84)

Undergraduate Certificate

- Communicative Sciences and Disorders Certificate (p. 85)

Communicative Sciences and Disorders B.A.

Bachelor of Arts - Communicative Sciences & Disorders

College of ED & Human Sciences

Degree Specific Credits: 67

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

Lower Core Courses	22
Upper Core Courses	24
Degree Electives	18-20
Biological Science Requirement	
Physical Science Requirement	
Statistics Requirement	
Psychology Requirement	
Modern and Classical Language Requirement	
Total Hours	64-66

Lower Core Courses

Rule: All courses listed are required

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	Research Methods I	3
Total Hours		21

Minimum Required Grade: C-

Upper Core Courses

Rule: All courses listed are required

BIOH 330	Anat & Phys Speech Mech	3
CSD 320	Phono Devel & Phonetics	3
CSD 345	Developmental Speech & 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
Total Hours		21

Minimum Required Grade: C-

Degree Electives

Rule: Must complete the following subcategories

18 Total Credits Required

Biological Science Requirement

Rule: Choose 1 of the listed courses

Select one of the following:	3-4
BIOB 101N	Discover Biology
BIOB 160N	Principles of Living Systems
& BIOB 161N	and Prncpls of Living Systems Lab
Total Hours	3-4

Minimum Required Grade: C-

Physical Science Requirement

Rule: 1 chemistry or physics course, which must be at the 100-level or above and a minimum of 3 credits

Note: Student may take another approved physical science course.

Statistics Requirement

Rule: Choose 1 of the listed courses

Select one of the following:	3-4
PSYX 222	Psychological Statistics
SOCI 202	Social Statistics

STAT 216	Introduction to Statistics	
Total Hours		3-4

Minimum Required Grade: C-

Psychology Requirement

Rule: Choose 1 of the listed courses

PSYX 230	Developmental Psychology	3
or PSYX 233	Fund of Psychology of Aging	
Total Hours		3

Minimum Required Grade: C-

Modern and Classical Language Requirement

Rule: Choose a sequence of 2 semesters

Note: Student must take a sequence (2 semesters) of a modern or classical language.

Suggested Course of Study

First Year

CSD 110	The Field of CSD	3
PSYX 100S	Intro to Psychology	3
M 115	Probability and Linear Mathematics	3
WRIT 101	College Writing I	3
LING 270S	Intro to Linguistics	3
BIOB 101N	Discover Biology	3
or BIOB 160N	Principles of Living Systems	

Second Year

BIOH 330	Anat & Phys Speech Mech	3
CSD 210	Speech & Lang Devel	3
CSD 221N	Fundamentals of Acoustics	3
CSD 222	Intro to Audiology	3
PSYX 120	Research Methods I	3
PSYX 230	Developmental Psychology	3
or PSYX 233	Fund of Psychology of Aging	

Third Year

Select one from the following:		3
STAT 216	Introduction to Statistics	
PSYX 222	Psychological Statistics	
SOCI 202	Social Statistics	
CSD 320	Phono Devel & Phonetics	3

Fourth Year

CSD 405	The Clinical Process	3
CSD 420	Speech Science	3
CSD 430	Senior Capstone	3
CSD 450	Intro to Aural Rehabilitation	3
CSD 480	Multicultural Issues	3
Total Hours		57

Communicative Sciences and Disorders Certificate

Minor - Communicative Sciences & Disorders

College of ED & Human Sciences

Degree Specific Credits: 18

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Summary

Core Courses	12
Minor Electives	6
Total Hours	18

Core Courses

Rule: Students must complete 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

Minimum Required Grade: C-

Minor Electives

Rule: Choose at least 6 upper division credits from the list

Select at least 6 credits from the following:		6
CSD 320	Phono Devel & Phonetics	
CSD 345	Developmental Speech & Language Disorders	
CSD 365	Acquired Speech and Language Disorders	
CSD 491	Special Topics	
Total Hours		6

Minimum Required Grade: C-

Counselor Education Department

John Sommers-Flanagan and Kirsten Murray, Co-Chair

The Counselor Education program educates students for employment in school (K-12 and higher education) and community mental health and human service settings. Counselors are practitioners, consultants, and coordinators who assist in problem solving, decision-making skills, personal growth and development, and individual, family school, and/or career issues. Counselors receive training in the eight core areas identified by the American Counseling Association Council for Accreditation of Counseling and Related Educational Programs:

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. professional orientation.

We offer a School Counseling M.A., a Mental Health Counseling M.A., and an Interdisciplinary M.A. Each option requires additional specialty courses and comprehensive written and oral examinations focused on the student's career track. The more advanced graduate degrees (Ed.S. and Ed.D.) develop depth, supervisory, and leadership skills in these areas.

The Department of Counselor Education is also the academic home for an interdisciplinary masters degree in Global Youth Development. Students in this program are prepared for humanitarian and advocacy work, focusing specifically on youth and family development across cultures. Requirements include one year of campus-based course work and an approved internship of at least two semesters duration working with youth and family concerns. GYD is a Peace Corps Master's International program, and the expectation therefore is that students will complete the Internship requirement by serving as U.S. Peace Corps Volunteers abroad. For further information and course listings, see the IYFD website (<http://coehs.umt.edu/departments/counselor/IYFD/default.php>): <http://coehs.umt.edu/departments/counselor/IYFD/default.php>

Graduate Programs

The M.A., Ed.S., and Ed.D. are offered in Counselor Education. An interdisciplinary M.A. is offered in Global Youth Development. Information regarding specific requirements and program options is available from the Phyllis J. Washington College of Education and Human Sciences. For more information, please refer to the University of Montana Graduate Programs and Admissions Catalog. Graduate programs are accredited by NCATE and CACREP.

Admission to Counseling

Applicants for this program should contact the Department for more specific admissions information. Requirements include official transcripts from all undergraduate and graduate institutions attended; three current letters of recommendation; and a letter of application stating academic and professional background, purpose in obtaining the degree, and thoughts about eventual employment and career direction. Applicants have the option to include GRE scores. Priority deadline is February 15th with complete applications reviewed after this date on a space available basis. Admission is competitive.

Certification Requirements

The Counselor Education, M.A., School Counseling option, leads to licensure at the Class IV level.

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., Administrative Licensure, and Ed.D. are offered in education administration and supervision. Information regarding specific requirements and program options is available from the Phyllis J. Washington College of Education and Human Sciences. For more information, please refer to the University of Montana Graduate Programs and Admissions Catalog. Graduate programs are accredited by The National Council for Accreditation of Teacher Education (NCATE) and The Montana Board of Public Education (BPE).

Admission to Educational Leadership

The Program Admissions Committee has established policies and standards for admission which include

- the GRE (verbal and quantitative);
- three letters of recommendation (one from an immediate supervisor);
- official transcripts for all undergraduate and graduate coursework;
- qualifying examination; and
- interviews (doctoral).

Contact the Department for details.

Certification Requirements

Education Leadership degree and administrative licensure programs lead to Montana Class 3 Administrative Licensure with either a K-12 Principal or Superintendent endorsement. Please note that in addition to the coursework and degree requirements, the State of Montana also requires licensed teaching, school counseling, or administrative experience for the Class 3 license.

Courses (Check master schedule for availability of all courses)

R- before the course description indicates the course may be repeated for credit to the maximum indicated after the R-

Global Youth Development Department

Lindsey Nichols, Assistant Professor of Counselor Education, Director

Housed in the Department of Counselor Education, this interdisciplinary master's degree program is designed for students who wish to engage in culturally-relevant volunteer work or paid employment in the realm of child and family assistance. It is affiliated with the United States Peace Corps as a partner school for their master's international program. Requirements include one year of full-time instruction at UM, a significant period of time engaging in internship work in an applied intercultural

setting, and a final professional paper or thesis. Internships will typically be 1-2 years and will involve work in a culture other than one's own. Students participating in this program are expected to gain the following background and competencies:

- important interculturally-informed helping skills for working with youth, women, families and communities in culture other than their own
- a solid background in issues, concerns, and critiques regarding assistance and interventions across culture, both historically and currently
- the opportunity to pursue and participate in a significant field experience, working with an established helping agency in another culture or country

Undergraduate Minor

- Human and Family Development (p. 333)

Health and Human Performance Department

Scott Richter, Chair

Vision

Health and Human Performance Professionals

Creating a Healthy, Progressive Global Community

Mission

In pursuit of our vision, the Department of Health and Human Performance (HHP) prepares quality graduates to be ethical and competent entry level professionals in health and human performance related occupations or candidates for advanced study in related disciplines. Within the liberal arts tradition of the University of Montana and the mission of the College of Education and Human Sciences, the Department of Health and Human Performance engages in professional education, scholarly activity, and meaningful public service. The department emphasizes mental, social, spiritual, and physical dimensions of health to promote healthy lifestyle choices and enhanced quality of life.

The Health and Human Performance Department has established the following goals in support of our vision and mission:

- **Promote** an understanding and appreciation for the scope of the profession
- **Enhance** student awareness of the departmental mission and goals
- **Coordinate** student development of the basic skills germane to effective practice as health and human performance professionals or successful pursuit of advanced studies
- **Cultivate** higher-order thinking skills that increase 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. Community Health and Prevention Sciences (p. 91),
2. Exercise Science Applied (p. 90),
3. Exercise Science Pre-Athletic Training (p. 87),
4. Exercise Science Pre-Professional (p. 94), or
5. Health Enhancement (p. 93).

The **Community Health and Prevention Sciences 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 option are those who are deeply interested in the interrelationship among all aspects of health (social, emotional, mental, spiritual and physical) and in the life and behavioral sciences. In addition, success in this field requires imagination and creativity in applying scientific knowledge to strategies for individual and community change through a wide range of educational, environmental and political approaches. Graduates of this program will be prepared to take the National Certification Exam for Health Education Specialists.

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 **Health Enhancement** concentration prepares students to use a variety of educational strategies designed to facilitate the adoption of healthy behaviors in K-12 students. Upon acceptance into the College of Education and Human Sciences, and successful completion of the course requirements, students will be eligible for a Montana K-12 teaching license. See Admission Policies below.

The **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>): <http://www.umt.edu/grad/>

The College of Education and Human Sciences Graduate website (http://coehs.umt.edu/departments/hhp/graduate_programs/default.php): http://coehs.umt.edu/departments/hhp/graduate_programs/default.php

Activity Classes

The HHP department also provides a large activity program (ACT classes numbered 100-287, ACTV 189 and HHP 170) 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 (p. 28) in the catalog. See index.

Students must fulfill the requirements listed below. All HHP majors must earn a minimum grade of a C- in all required courses, including prerequisites, except for special cases of higher requirements in Athletic Training and Health Enhancement noted below. In-department and out-of-department courses specifically listed in this catalog as requirements for Health and Human Performance majors must be taken for a traditional letter grade.

The University of Montana symbolic systems requirement is met by completing one of the following statistics courses and any pre-requisite courses:

STAT 216	Introduction to Statistics	4
PSYX 222	Psychological Statistics	3
SOCI 202	Social Statistics	3
WILD 240	Intro to Biostatistics	3
EDU 421	Statistical Procedures in Educ	3

All options must meet this requirement.

Admission Policies for Health Enhancement Option

The Health Enhancement option is designed for individuals who wish to teach in K-12 school systems. Application for admission to the College of Education must be made (refer to <http://coehs.umt.edu/departments/hhp/default.php>). Applications are accepted twice a year; however, the number of students admitted into the program is limited. Application is made no sooner than after the completion of 30 hours of course work. A cumulative GPA of 2.75 is necessary for application.

To successfully complete the program in Health Enhancement, a student must receive a grade of C (2.00) or above in every course in the following areas:

- teaching major,
- professional education courses,
- a drug abuse course,
- PSYX 100S, WRIT 101, and EDU 481. These courses must be taken as a traditional letter grade.

Admission Policies for the Masters in Athletic Training Degree Program 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 (<http://coehs.umt.edu/umat/applications.php>) 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>) <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 more than 2 "C" grades in graduate courses
- Achieve satisfactory evaluations in each Clinical Phase before progressing
- Successfully complete coursework in the sequence indicated by the program of study unless approved by Athletic Training Program Director
- Abide by the Code of Ethics of the University and those established by the National Athletic Trainers' Association

Students are expected to complete at least 20 hours every two weeks and a maximum of 60 hours in two weeks and many of those hours may be during evenings and weekends. Students who fail to meet the retention criteria will be placed on probation in the Athletic Training Program for a maximum of two semesters. This may limit progress of course sequencing and clinical phases. If standards are not met by the end of the probationary period, the student will be dismissed from the Athletic Training Program. Students who are placed on probation may require remediation as deemed appropriate by the Program Director.

For further information on clinical education requirements, please visit the athletic training website.

Additional Costs Associated with 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),
 - Initial NATA Membership Fee (approximately \$60),
 - Polo Shirts (\$30), and
 - Medical Pack/Kit (\$30).

Transportation is needed for all off-campus clinical sites. Each student will have a minimum of one off-campus site.

General HHP Program Requirements

First Aid and CPR Exit Certifications

All Health and Human Performance students are required to have the appropriate certification in first aid/emergency care and CPR at graduation. The following certifications will meet this competency:

Any one of the following current first aid/emergency care certifications:

- American Academy of Orthopedic Surgeons (AAOS) - Emergency Medical Responder
- National Safety Council Level - First Responder
- Wilderness First Responder
- American Heart Association - First Responder

Plus one of the following CPR certifications:

- American Heart Association (Health Care Provider)
- American Red Cross (Professional Rescuer)

Or Certification as an Emergency Medical Technician

Health and Human Performance students may use available elective credits to take ECP 120/ECP 121 to meet this competency, or they may

elect to fulfill the competency through one of the department approved agencies. Academic credit for ECP 120/ECP 121 will not be awarded for certifications earned at off-campus approved agencies other than the Health and Human Performance Department at the University of Montana.

Upper-division Writing Expectation

The HHP Department offers three upper-division writing courses to fulfill the General Education writing requirements; KIN 447, AHAT 342 and HEE 301. Exercise Science and Community Health and Prevention Sciences students are required to complete KIN 447 or AHAT 342, and Health Enhancement students are required to complete HEE 301.

Undergraduate students must complete requirements for a minimum of one of the options listed below. The typical student may take more than four years to complete these requirements, especially in the Health Enhancement option.

Undergraduate

- Health & Human Performance B.S., Community Health & Prevention Sciences Concentration (p. 91)
- Health & Human Performance B.S., Exercise Science - Applied Concentration (p. 90)
- Health & Human Performance B.S., Exercise Sciences - PreProfessional Concentration (p. 94)
- Health & Human Performance B.S., Health Enhancement Concentration (p. 93)

Undergraduate Certificate

- Health Behavior Coaching Professional Certificate (p. 92)

Applied Exercise Science B.S.

Bachelor of Science - Health & Human Performance; Exercise Science - Applied Concentration

College of ED & Human Sciences

Degree Specific Credits: 105

Required Cumulative GPA: 2.0

Catalog Year: 2017-2017

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

Lower Division Departmental Required Courses	13
Outside Major Lower Division Required Courses	38-41
Upper Division Departmental Required Courses	22-25
Outside Major Upper Division Required Courses	8
Elective Courses	18
Total Hours	99-105

Lower Division Departmental Required Courses

Rule: All courses are required.

Note: Students should take ECP 120, ECP 121 within two years of graduation, in order to ensure current certification. Students may substitute outside Emergency Medical Responder Certification for these courses.

ECP 120	Emergency Medical Responder Lecture	3
ECP 121	Emergency Medical Responder Lab	1
KIN 201	Basic Exercise Prescription	3
KIN 205	Foundations of HHP	3
NUTR 221N	Basic Human Nutrition	3
Total Hours		13

Minimum Required Grade: C-

Outside Major Lower Division Required Courses

Rule: All courses are required.

Note: Students interested in Medical School should pay special attention to those additional requirements. Please meet with the Medical School Adviser in the HHP Department if you intend to also major in Pre-Medical studies.

BIOB 160N	Principles of Living Systems	3
BIOB 161N	Prncpls of Living Systems Lab	1
CHMY 121N	Introduction to General Chemistry	3
CHMY 123	Introduction to Organic and Biochemistry	3
CHMY 141N	College Chemistry I	4
COMX 111A	Intro to Public Speaking	3
Select one of the following:		4-6

M 151	Precalculus	
M 121 & M 122	College Algebra and College Trigonometry	
PHSX 205N	College Physics I	4
PHSX 206N	College Physics I Laboratory	1
PSYX 100S	Intro to Psychology	3
Select 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)	
WILD 240	Intro to Biostatistics (must be pre-approved by advisor)	
EDU 421	Statistical Procedures in Educ (must be pre-approved by advisor)	

WRIT 101	College Writing I	3
Select one of the following:		3
WRIT 121	Intro to Technical Writing	
WRIT 201	College Writing II	
WRIT 222	Technical Approach to Writing	
Total Hours		38-41

Minimum Required Grade: C-

Upper Division Departmental Required Courses

Rule: All courses are required.

Note: Students take KIN 498 for 3 to 6 credits.

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	3-6
NUTR 411	Nutrition For Sports & Exercise	3
Total Hours		22-25

Minimum Required Grade: C-

Outside Major Upper Division Required Courses

Rule: All courses are required.

Note: It is strongly recommended that students take either BIOH 112 OR BIOH 113 OR BIOB 160N prior to taking Anatomy and Physiology.

BIOH 365	Human AP I for Health Profns	4
BIOH 370	Human AP II for Health Profns	4
Total Hours		8

Minimum Required Grade: C-

Elective Courses

Rule: Electives require adviser pre-approval.

Note: Electives require adviser pre-approval.

Students may use any pre-approved Math and Science Elective courses in this category. At least 3 must be Upper Division Credits. Special care should be taken if BIOH 201N/BIOH 202N and BIOH 211N/BIOH 212N were used for Anatomy and Physiology requirements, as more Upper Division Credits may need to be used in this category.

Minimum Required Grade: C-

18 Total Credits Required

Community Health and Prevention Sciences B.S.

Bachelor of Science - Health & Human Performance; Community Health & Prevent Science Concentration

College of ED & Human Sciences

Degree Specific Credits: 106

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

Lower Division Required Courses	16
Outside Major Lower Division Required Courses	39-40
Upper Division Departmental Required Courses	28-34
Outside Major Upper Division Required Courses	6
Elective Courses	18-24
Total Hours	107-120

Lower Division Required Courses

Rule: All courses are required.

Note: Students should take ECP 120 and ECP 121 within two years of graduation in order to ensure current certification. Students may substitute outside Emergency Medical Responder Certification for these courses.

ECP 120	Emergency Medical Responder Lecture	3
ECP 121	Emergency Medical Responder Lab	1
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		16

Minimum Required Grade: C-

Outside Major Lower Division Required Courses

Rule: All courses are required.

Note: It is strongly recommended that students take either BIOH 112 OR BIOH 113 OR BIOB 160N as an elective course prior to taking Anatomy and Physiology.

Note: BIOH 201N and BIOH 202N are co-requisites completed for a total of 4 credits and BIOH 211N and BIOH 212N are co-requisites completed for a total of 4 credits.

BIOH 201N	Human Anat Phys I (equiv 301)	4
BIOM 250N	Microbiology for Hlth Sciences	3
BIOH 211N	Human Anat Phys II (equiv 311)	4

CHMY 121N	Introduction to General Chemistry	3
COMX 111A	Intro to Public Speaking	3
ENST 225	Community & Environment	3
M 115	Probability and Linear Mathematics	3
Select one of the following:		3-4
PSYX 100S	Intro to Psychology	
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)	
WILD 240	Intro to Biostatistics (must be pre-approved by advisor)	
EDU 421	Statistical Procedures in Educ (must be pre-approved by advisor)	
WGSS 263S	Social and Political Perspectives on Women, Men, and Sexuality	3
WRIT 121	Intro to Technical Writing	3
or WRIT 201	College Writing II	
Total Hours		32-33

Minimum Required Grade: C-

Upper Division Departmental Required Courses

Rule: All courses are required.

CHTH 355	Theory Practicum Community Health Education	3
CHTH 445	Program Plannig in Community Health	4
CHTH 485	Theories of Health Behaviors and Counseling	3
CHTH 498	Internship	4-6
HTH 370	Peer Health Education	3
HTH 395	Peer Health Practicum	1-3
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		30-34

Minimum Required Grade: C-

Outside Major Upper Division Required Courses

Rule: All courses are required.

ANTY 426	Culture, Health and Healing	3
S W 423	Addiction Studies	3
Total Hours		6

Minimum Required Grade: C-

Elective Courses

Rule: Elective courses require adviser pre-approval.

Note: Electives require adviser consent. Students should take an appropriate number of Upper Division Electives to achieve 39 Upper Division Credits, per UM graduation requirements.

Minimum Required Grade: C-

18-24 Total Credits Required

Health Behavior Coaching (C)

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 pre-requisite or co-requisite; and
4. letter of intent.

The Student Wellness Program and HHP 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.

Professional Certificate - Health Behavior Coaching

College of ED & Human Sciences

Degree Specific Credits: 25

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Note: 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 pre-requisite or co-requisite; and
4. letter of intent.

Summary

Core Courses	25
Total Hours	25

Core Courses

Rule: Students must complete the following courses

Note: HTH 395 must be completed for 2 credits and CHTH 498 must be completed for 4 credits

CHTH 485	Theories of Health Behaviors and Counseling	3
CHTH 498	Internship	4
HTH 370	Peer Health Education	3
HTH 395	Peer Health Practicum	2

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-

In addition to the courses listed above, students must complete the requirements for a bachelor's degree from an accredited university.

Health Enhancement B.S.

Individuals interested in teaching in K-12 schools must complete a degree in the content area they want to teach plus the teacher preparation program through the Department of Curriculum and Instruction. Individuals must complete the teaching major/teaching track within that degree program, which may contain different course requirements than the academic major since the sequence of courses is designed to meet state standards. Upon completion of the degree program with the teaching track and the secondary licensure program, one will be eligible for a standard Montana teaching license in this content area.

- Secondary Education Licensure Program (<http://www.coehs.umt.edu/departments/currinst/undergradprograms/seced/default.php>)
- Licensure Degree Requirements (p. 101)

Bachelor of Science - Health & Human Performance; Health Enhancement Concentration

College of ED & Human Sciences

Degree Specific Credits: 93

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Note: The Bachelor of Science degree in HHP with the Health Enhancement option requires 130 total credits to graduate. Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Curriculum & Instruction (p. 95) in the College of Education and Human Sciences for 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 (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

Lower Division Departmental Required Courses	25
Outside Major Lower Division Required Courses	36-37
Upper Division Departmental Required Courses	26

Outside Major Upper Division Required Courses	3
Total Hours	90-91

Lower Division Departmental Required Courses

Rule: All courses are required.

Note: Students should take ECP 120 and ECP 121 within two years of graduation in order to ensure current certification. Students may substitute outside Emergency Medical Responder Certification for these courses.

AHAT 210	Prevention and Care Athletic Injuries	2
AHAT 213	Prevention and Care Athletic Injuries Lab	1
ECP 121	Emergency Medical Responder Lab	1
ECP 120	Emergency Medical Responder Lecture	3
HEE 203	Professional Activities I	2
HEE 204	Professional Activities II	2
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		23

Minimum Required Grade: C-

Outside Major Lower Division Required Courses

Rule: All courses are required.

Note: BIOH 201N and BIOH 202N are co-requisites completed for a total of 4 credits and BIOH 211N and BIOH 212N are co-requisites completed for a total of 4 credits.

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
CHMY 121N	Introduction to General Chemistry	3
COMX 111A	Intro to Public Speaking	3
M 115	Probability and Linear Mathematics	3
NASX 105H	Intro Native Amer Studies	3
PSYX 100S	Intro to Psychology	3
Select 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)	
WILD 240	Intro to Biostatistics (must be pre-approved by advisor)	
EDU 421	Statistical Procedures in Educ (must be pre-approved by advisor)	
WRIT 101	College Writing I	3
WRIT 121	Intro to Technical Writing	3
or WRIT 201	College Writing II	
Total Hours		35-36

Minimum Required Grade: C-

Upper Division Departmental Required Courses**Rule:** All courses are required.

HEE 301	Meth of Secondary HE	3
HEE 302	Methods of Instructional Strategies in Elementary PE	3
HEE 340	Methods of Health Education	3
HTH 465	Leading Health and, Human Perform Orgs	3
HTH 475E	Legal and Ethical Issues Health and Exercise Professions	3
KIN 320	Exercise Physiology	3
KIN 321	Exercise Physiology Lab	1
KIN 322	Kinesiology	3
KIN 323	Anatomical Kinesiology Lab	1
KIN 330	Motor Learning and Control	3
Total Hours		26

Minimum Required Grade: C-

Outside Major Upper Division Required Courses**Rule:** Complete the following course.

ENST 472	Gen Sci: Conservation Education	3
	or BIOE 172N Introductory Ecology	
Total Hours		3

Minimum Required Grade: C-

Pre-Professional Exercise Science B.S.**Bachelor of Science - Health & Human Performance; Exercise Science - PreProfessional Concentration****College of ED & Human Sciences****Degree Specific Credits:** 90-93**Required Cumulative GPA:** 2.0**Catalog Year:** 2017-2018**General Education Requirements**

Information regarding these requirements can be found in the General Education Section (<http://catalog.umd.edu/academics/general-education-requirements>) of the catalog.

Summary

Major Lower Division Departmental Required Courses	13
Outside Major Lower Division Required Courses	56-62
Major Upper Division Departmental Required Courses	22-25

Outside Major Upper Division Required Courses	8-16
Elective Courses	18
Total Hours	117-134

Major Lower Division Departmental Required Courses**Rule:** All courses are required.

Note: Students should take ECP 120, ECP 121 within two years of graduation in order to ensure current certification. Students may also substitute outside Emergency Medical Responder Certification for these courses.

ECP 120	Emergency Medical Responder Lecture	3
ECP 121	Emergency Medical Responder Lab	1
KIN 201	Basic Exercise Prescription	3
KIN 205	Foundations of HHP	3
NUTR 221N	Basic Human Nutrition	3
Total Hours		13

Minimum Required Grade: C-

Outside Major Lower Division Required Courses**Rule:** All courses are required.

Notes: Students interested in Medical or Dental School should replace CHMY 121N, CHMY 123 and CHMY 124 with CHMY 141N, 142N,221/222 and 223/224. Students interested in Physical Therapy or other graduate medical professions generally take CHMY 121N, 123 and 124, but you should talk to the HHP advisors prior to starting your chemistry series

Chose one of the following courses: 3-5

BIOB 160N	Principles of Living Systems	
BIOB 170N & BIOB 171N	Princpls Biological Diversity and Princpls Biological Dvrsty Lab	
BIOH 212N	Human Anat Phys II Lab	
BIOH 213N	The Biology of Behavior	

Select one of the Chemistry sequences:

General Chemistry: 8-9

CHMY 121N	Introduction to General Chemistry	
CHMY 123 & CHMY 124	Introduction to Organic and Biochemistry and Introduction to Organic and Biochemistry Lab	

College Chemistry: 18

CHMY 141N	College Chemistry I	
CHMY 143N	College Chemistry II	
CHMY 221 & CHMY 222	Organic Chemistry I and Organic Chemistry I Lab	
CHMY 223 & CHMY 224	Organic Chemistry II and Organic Chemistry II Lab	

COMX 111A Intro to Public Speaking 3

Select one of the following: 4-6

M 121 & M 122	College Algebra and College Trigonometry	
M 151	Precalculus	
M 162	Applied Calculus	4

M 171	Calculus I	4
Select one of the following physics sequences:		
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	
PSYX 100S	Intro to Psychology	3
Select one of the following:		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)	
WILD 240	Intro to Biostatistics (must be pre-approved by advisor)	
EDU 421	Statistical Procedures in Educ (must be pre-approved by advisor)	
WRIT 101	College Writing I	3
WRIT 121 or WRIT 201	Intro to Technical Writing College Writing II	3
Total Hours		56-62

Minimum Required Grade: C-

Major Upper Division Departmental Required Courses

Rule: All courses are required.

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 or AHAT 342	Analytical & Communicative Techniques Therapeutic Interventions	3
KIN 460	ECG Assessment	2
KIN 483	Exercise Disease & Aging	3
KIN 484	Exercise Disease & Aging Lab	1
KIN 498 or KIN 499	Internship Capstone	3-6
Total Hours		22-25

Minimum Required Grade: C-

Outside Major Upper Division Required Courses

Rule: All courses are required.

Notes: It is required that students take either BIOH 112 OR BIOH 113 OR BIOB 160N prior to taking Anatomy and Physiology.

Students who take the BIOH 201/202 and BIOH 211/212 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.

Choose one of the following Anatomy and Physiology sequences 8-16

UM courses	
BIOH 365	Human AP I for Health Profsns
BIOH 370	Human AP II for Health Profsns
Missoula College courses	
BIOH 201N & BIOH 202N	Human Anat Phys I (equiv 301) and Human Anat and Phys I Lab
BIOH 211N & BIOH 212N	Human Anat Phys II (equiv 311) and Human Anat Phys II Lab

Total Hours 8-16

Minimum Required Grade: C-

Elective Courses

Rule: Electives require adviser pre-approval.

Students must complete 18 elective credit hours in addition to the list of lower and upper division courses above. Students who complete the BIOH 365/370 Anatomy and Physiology series will need an additional 7-10 upper division credit hours and students who complete the BIOH 201/202 and BIOH 211/212 for their Anatomy and Physiology will require an additional 15-18 upper division credits. 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-

Teaching and Learning Department

Adrea Lawrence, 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 (<http://coehs.umt.edu/departments/currinst/default.php>).

Graduate Programs

The department offers the Master of Education (M.Ed.) in curriculum and instruction. Students select from one of the following options:

- curriculum studies,
- 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 (<http://coehs.umt.edu/departments/currinst/masterofed/default.php>), 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 (<http://www.coehs.umt.edu>).

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 (<http://coehs.umt.edu/departments/currinst/forms.php>).

Once admitted, licensure candidates must maintain a minimum GPA of 2.75 each semester to continue in the program. Candidates who interrupt their studies for more than two years are placed on inactive status and must apply for readmission to both the University and the Teacher Education Program.

Candidates seeking a K-12 endorsement in library, 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 (<http://www.coehs.umt.edu/departments/currinst/undergradprograms/seced/default.php>).

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. (p. 100)
- Early Childhood Education P-3 B.A. (p. 98)

Undergraduate Minors

- Administrative Systems Management (p. 97)
- Early Childhood Education (p. 95)

Undergraduate Teaching Licensures

- Teacher Librarian Endorsement (p. 103)
- Teaching ESL (p. 103)
- Teaching Reading (p. 104)
- Teaching Special Education (p. 104)
- Technology in Education (p. 105)
- Secondary Certification (p. 101)

Administrative Systems Management Minor

Minor - Administrative System Management (Minor)

College of ED & Human Sciences

Degree Specific Credits: 27

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Note: This is a non-teaching minor offered with the Department of Curriculum & Instruction in the College of Education and Human Sciences. Admission to the Teacher Education Program is NOT required.

Summary

Administrative Systems Management Minor Required Courses	27
Total Hours	27

Administrative Systems Management Minor Required Courses

Rule: Complete all of the following courses.

ACTG 201	Principles of Financial Accounting	3
BGEN 235	Business Law	3
BMGT 340	Mgmt & Organization Behavior	3
C&I 287	Business Communications	3
C&I 341	Information Management & Design	3
CSCI 172	Intro to Computer Modeling	3
ECNS 201S	Principles of Microeconomics	3
EDU 472	Dev Digital Rich Workplace	3
M 115	Probability and Linear Mathematics	3
Total Hours		27

Minimum Required Grade: C-

Early Childhood Education Minor Minor - Early Childhood Education (Minor)

College of ED & Human Sciences

Degree Specific Credits: 22

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Note: This minor can only be completed by individuals seeking K-8 elementary licensure or currently licensed elementary education teachers.

Summary

Required courses	22
Total Hours	22

Required Courses

Rule: Must complete all of the following courses:

Note: Students must take two semesters of EDU 397:

1. Methods: PK-4 Early Numeracy and
2. Methods: PK-3 Early Literacy.

EDEC 408	Early Childhood Principles and Practices	3
EDEC 410	Families, Communities, Culture	3
EDEC 420	Meeting Standards Through Play-Based Environments	3
EDEC 430	SocEmot Dvlpmnt in Yng Child	3
EDEC 495	EC Fieldwork/Practicum: Integrated Curriculum	1
EDU 222	Educational Psych Child Dev	3
EDU 397	Methods: Teaching & Assessing (two semesters)	6
Total Hours		22

Minimum Required Grade: C-

Early Childhood Education P-3 B.A.

Bachelor of Arts - Early Childhood Education P-3

College of ED & Human Sciences

Degree Specific Credits: 110-111

Required Cumulative GPA: 2.75

Catalog Year: 2017-2018

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 (<http://catalog.umd.edu/academics/general-education-requirements>) of the catalog.

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	9
Teacher Education Program Professional Licensure Courses	64
Total Hours	110-111

Minimum Required Grade: C-

Literature Content Courses

Select one of the following:	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 Tradts Native Amer	
Total Hours		3-4

Minimum Required Grade: C-

Math Content Courses

Rule: Complete one of the following.

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

Rule: Complete all of the following.

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 all of the following.

Minimum Required Grade: C-

12 Total Credits Required

Geography

GPHY 121S	Human Geography	3
	or GPHY 141S Geography of World Regions	
Total Hours		3

Minimum Required Grade: C-

Social Studies Courses

Rule: 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

Rule: Complete all of the following.

HEE 302	Methods of Instructional Strategies in Elementary PE	3
Total Hours		3

Minimum Required Grade: C-

The Arts

Rule: Complete all of the following.

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: All courses are required.

Minimum Required Grade: C-

64 Total Credits Required

Level 1 Learning and Instruction

Rule: All courses must be completed concurrently.

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).

EDEC 408	Early Childhood Principles and Practices	3
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	1
Total Hours		17

Minimum Required Grade: C-

Level 2 Pedagogy and Content Knowledge

Rule: All courses must be completed concurrently.

EDEC 430	SocEmot Dvlpmnt in Yng Child	3
EDEC 453	Early Childhood STEM	3
EDEC 454	PK-3 Language Arts and Reading Methods	3
EDEC 491	Special Topics	1-6
EDU 346	Exceptionalities	3
EDU 370	IntegTech into Educ	3
EDU 451	Clinical Exp:L3 Pedagogy Cntnt	1
Total Hours		17-22

Minimum Required Grade: C-

Level 3 Pedagogy and Content Knowledge

Rule: All courses must be completed concurrently.

EDU 407E	Ethics & Policy Issues	3
EDEC 230	Positive Child Guidance and Management with lab	3
EDEC 405	Early Childhood Assessment and Outcomes	3
EDEC 410	Families, Communities, Culture	3
EDEC 420	Meeting Standards Through Play-Based Environments	3

EDUC 495	EC Fieldwork/Practicum: Integrated Curriculum	1
Total Hours		16

Minimum Required Grade: C-

Level 4 Student Teaching

Rule: All courses must be completed concurrently.

EDU 494	Seminar: Refl Pract & App Rsrch	1
EDU 495	Student Teaching	14
Total Hours		15

Minimum Required Grade: C-

Elementary Education B.A. Bachelor of Arts - Elementary Education

College of ED & Human Sciences

Degree Specific Credits: 116

Required Cumulative GPA: 2.75

Catalog Year: 2017-2018

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 (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

Language Arts Content Courses	9-10
Literature	
College Writing	
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
Total Hours	107-108

Language Arts Content Courses

Rule: All courses are required.

Minimum Required Grade: C-

9 Total Credits Required

Literature

Rule: Complete one of the following.

Note: Other literature courses may meet this requirement. Please consult with the Education Advisor for approval.

Select one of the following: 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

Minimum Required Grade: C-

College Writing

Rule: Complete the following course.

WRIT 101	College Writing I	3
Total Hours		3

Minimum Required Grade: C-

Children's Literature

Rule: Complete the following course.

EDU 331	Lit & Literacy for Children	3
Total Hours		3

Minimum Required Grade: C-

Science Content Courses

Rule: Complete all of the following.

Note: Other science courses may meet the requirements. Please consult with the Education Advisor.

BIOB 226N	Gen Science: Earth & Life Sci	5
PHSX 225N	Gen Science: Phys & Chem Sci	5
Total Hours		10

Minimum Required Grade: C-

Social Studies Content Courses

Rule: Complete all of the following.

Minimum Required Grade: C-

16 Total Credits Required

Geography

Rule: Complete one of the following.

GPHY 121S	Human Geography	3
or GPHY 141S	Geography of World Regions	
Total Hours		3

Minimum Required Grade: C-

American History

Rule: Complete one of the following.

Note: Other history courses may fulfill this requirement. Please consult with the Education Advisor.

HSTA 101H	American History I	4
	or HSTA 102H American History II	

Total Hours	4
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Minimum Required Grade: C-

Other Social Studies Courses

Rule: Complete all of the following courses.

Note: Other Native American Studies courses may fulfill the NASX 105H requirement. Please consult with the Education Advisor.

HSTA 255	Montana History	3
NASX 105H	Intro Native Amer Studies	3
PSCI 210S	Intro to American Government	3

Total Hours	9
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Minimum Required Grade: C-

Health and Physical Education

Rule: Complete all of the following.

HEE 302	Methods of Instructional Strategies in Elementary PE	3
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Total Hours	3
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Minimum Required Grade: C-

The Arts

Rule: Complete all of the following.

ARTZ 302A	Elementary School Art	2
MUSE 397	Methods: K-8 Music	2
THTR 239A	Creative Drama/Dance: K-8	2

Total Hours	6
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Minimum Required Grade: C-

Teacher Education Program Professional Licensure Courses

Rule: All courses are required.

Minimum Required Grade: C-

60 Total Credits Required

Level 1

Rule: All courses must be completed concurrently.

Note: Students are required to complete EDU 397 Methods: Early Numeracy K-4 (3 credits) and EDU 397 Methods: PK-3 Early Reading (3 credits).

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
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Total Hours	13
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Minimum Required Grade: C-

Level 2

Rule: All courses must be completed concurrently.

Note: Students are required to complete EDU 397 Methods: PK-8 Language Arts (3 credits).

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
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Minimum Required Grade: C-

Level 3

Rule: All courses must be completed concurrently.

Note: Students must complete EDU 495 Clinical Experience: Level 3 (1 credit).

Students must complete four EDU 497 methods courses, including

- 5-8 Mathematics (3 credits),
- K-8 Social Studies (3 credits),
- K-8 Science (3 credits),
- 4-8 Reading (3 credits).

EDU 340	Classroom Management	3
EDU 495	Student Teaching	1
EDU 497	Teaching and Assessing (complete four courses)	12

Total Hours	16
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Minimum Required Grade: C-

Level 4

Rule: All courses must be completed concurrently.

Note: EDU 494 is completed for 1 credit and EDU 495 is completed for 14 credits.

EDU 494	Seminar:Refl Pract & App Rsrch	1
EDU 495	Student Teaching	14

Total Hours	15
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Minimum Required Grade: C-

Secondary Licensure

Students preparing to teach at the middle or high school levels (license for grades 5-12) will declare a major in the subject area(s) they wish to teach, e.g., English, mathematics, or any other of the state-approved major content endorsement areas listed previously. They are advised within their major department(s) and, upon admission to the Teacher

Education Program, they also are advised within the Department of Curriculum and Instruction regarding the requirements necessary to earn secondary licensure. All secondary licensure students seek admission to the Teacher Education Program, usually at the end of the sophomore year, and complete course work required for licensure in Curriculum and Instruction and in their major content area(s).

Applicants for Montana teaching licensure must:

1. satisfy all degree and licensure requirements as outlined below; and
2. be at least 18 years of age.

Information about the Teacher Education Program is available in the department office or on our website (<http://www.coehs.umt.edu>) at: <http://www.coehs.umt.edu/>

Teaching Licensure - Secondary Certification

College of ED & Human Sciences

Degree Specific Credits: 38

Required Cumulative GPA: 2.75

Catalog Year: 2017-2018

Note: Teacher Education Program coursework is completed in addition to a teaching major and leads to secondary (5-12) or K-12 teaching licensure in that content area. Individuals must be admitted to the Teacher Education Program to enroll in any EDU courses. See the Curriculum and Instruction website for additional information regarding admission.

Summary

Teacher Education Program Prerequisite	3
Additional Licensure Requirements	3
Education Coursework	15
Education Field Experiences	2
Student Teaching Field Experience	15
Total Hours	38

Teacher Education Program Prerequisite

Rule: This course must be completed before applying to the Teacher Education Program.

WRIT 101	College Writing I	3
Total Hours		3

Minimum Required Grade: C-

Additional Licensure Requirements

Rule: Complete all of the following courses.

Note: Students may take any NASX course to fulfill this requirement. If you choose to take a course with a Native American focus outside of the Native American Studies Department, please consult with your C&I advisor for approval.

NASX 105H	Intro Native Amer Studies	3
Total Hours		3

Minimum Required Grade: C-

Education Coursework

Rule: Admission to the Teacher Education Program is required to enroll in the following courses.

Note:

- Math and Business majors are not required to complete EDU 370. They meet the technology requirement through departmental requirements.
- Music majors do not complete EDU 370 nor EDU 481. They meet the technology and literacy requirements through departmental requirements.
- English majors do not complete EDU 481. They meet the literacy requirement through departmental requirements.

All students must complete major and/or minor teaching methods courses specific to their content areas. These methods course requirements are listed within the requirements for each program of study.

EDU 221	Ed Psych & Measuremnt	3
EDU 345	Excptnlty & Clsrn Mgmt	3
EDU 370	IntegTech into Educ	3
EDU 407E	Ethics & Policy Issues	3
EDU 481	Content Area Literacy	3
Total Hours		15

Minimum Required Grade: C-

Education Field Experiences

Rule: Admission to the Teacher Education Program is required to enroll in the following courses.

Note: EDU 202 is a prerequisite to EDU 395. EDU 395 is taken concurrently with the content-specific methods course.

EDU 202	Early Field Experience	1
EDU 395	Clinical Experience	1
Total Hours		2

Minimum Required Grade: Pass

Student Teaching Field Experience

Rule: All content, methods, and education courses must be completed prior to enrolling in the student teaching semester.

Note: An application is required to determine student teaching eligibility. See Teacher Education Services or the Office of Field Experiences for deadlines. The EDU 494 course is completed for 1 credit and the EDU 495 course is completed for 14 credits.

EDU 494	Seminar:Refl Pract & App Rsrch	1
EDU 495	Student Teaching	14
Total Hours		15

Minimum Required Grade: C-

Teaching ESL Licensure

To sign up for this option, you need to contact the Curriculum and Instruction Department. Do not fill out a major/minor form for graduation or the major/minor/concentration section of the major change form.

Approvals for this option must come from the Curriculum and Instruction Department.

Teaching Licensure - Education; Track: Teaching ESL

College of ED & Human Sciences

Degree Specific Credits: 24

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Note: Individuals completing a teaching minor must also complete a teaching major in another content area. Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Curriculum & Instruction in the College of Education and Human Sciences for more information. A minor GPA of 2.75 is required to be eligible for student teaching.

Summary

Core Courses	16
Required Courses	
Core Options	
Elective Courses	6
Total Hours	22

Core Courses

Rule: Must complete the following subcategories

16 Total Credits Required

Required Courses

Rule: All courses are required

Note: Those completing the teaching minor in ESL must take LING 495 for 3 credits.

LING 470	Linguistic Analysis	3
LING 471	Phonetics and Phonology	3
LING 472	Generative Syntax	3
LING 480	Tchg Engl as For Lang	3
LING 495	ESL Practicum	1-3
Total Hours		13-15

Minimum Required Grade: C-

Core Options

Rule: Complete 1 of the following courses

LING 477	Bilingualism	3
or LING 478	Learner Language	
Total Hours		3

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.

Must take all courses:		6
LING 473	Language and Culture	
LING 489	Morphology	
Total Hours		6

Minimum Required Grade: C-

Teaching Library Media Licensure

Teaching Licensure - Education; Track: Teacher Librarian Endorsement

College of ED & Human Sciences

Degree Specific Credits: 27

Required Cumulative GPA: 2.75

Catalog Year: 2017-2018

Note: This program of study can only be completed as a teaching minor for those pursuing a teaching major in another content area or by currently licensed teachers. Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of 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

Library Media Minor Courses	12
Library Media Practicum	2
Total Hours	14

Library Media Minor Courses

Rule: Complete all of the following courses.

Note: Students will also 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.

EDU 331	Lit & Literacy for Children	3
EDU 432	Lit & Literacy for Yng Adlts	3

LIBM 464	Reference Resources	3
LIBM 468	Admin & Assess of Library Programs	3
Total Hours		12

Minimum Required Grade: C-

Library Media Practicum

Rule: Complete the following course.

Note: All library media coursework must be completed prior to enrolling in the library media practicum.

LIBM 495	Practicum	2
Total Hours		2

Minimum Required Grade: C-

To sign up for this option, you need to contact the Curriculum and Instruction Department. Do not fill out a major/minor form for graduation or the major/minor/concentration section of the major change form. Approvals for this option must come from the Curriculum and Instruction Department.

Teaching Reading Licensure

Teaching Licensure - Education; Track: Teaching Reading

College of ED & Human Sciences

Degree Specific Credits: 25

Required Cumulative GPA: 2.75

Catalog Year: 2017-2018

Note: This program of study can only be completed as a teaching minor for those pursuing a teaching major in another content area or by currently licensed teachers. Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Curriculum & Instruction in the College of Education and Human Sciences for more information.

Summary

Reading Teaching Minor Courses	19
Reading Teaching Minor Practicum	6
Total Hours	25

Reading Teaching Minor Courses

Rule: Complete all of the following courses.

Note: The EDU 397 course number is used for multiple courses. Students should register for EDU 397 Teaching and Assessing PK-8 Language Arts. The EDU 497 course number is used for multiple courses. Students should register for EDU 497 Teaching and Assessing K-8 Reading.

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

Minimum Required Grade: C-

Reading Teaching Minor Practicum

Rule: Complete the following course.

Note: All reading coursework must be complete prior to enrolling in the reading practicum.

EDU 456	Applictn of Literacy Modls K12	6
Total Hours		6

Minimum Required Grade: C-

This is an advising track only and not an official program as recognized by the University of Montana (UM) or the Montana University System. This information will not appear on your UM transcript, diploma, university lists, student data system, or university publication. You do not fill out a major change for a track.

Teaching Special Education Licensure

Teaching Licensure - Education; Track: Teaching Special Education

College of ED & Human Sciences

Degree Specific Credits: 34

Required Cumulative GPA: 3.0

Catalog Year: 2017-2018

Note: This program of study can only be completed as a teaching minor for those pursuing a teaching major in another content area or by currently licensed teachers. Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Curriculum & Instruction in the College of Education and Human Sciences for more information.

Summary

Early Childhood Special Education	3
Special Education Requirements	21
Special Education Student Teaching	10
Total Hours	34

Early Childhood Special Education

Rule: Select one of the following courses.

EDSP 401	Intro Early Intervention	3
or EDSP 403	Curric/Mthds Early Spec Educ	
Total Hours		3
Minimum Required Grade: B		

Special Education Requirements

Rule: Complete all of the following courses.

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

Minimum Required Grade: B

Special Education Student Teaching

Rule: Complete the following course.

Note: All special education coursework must be completed prior to the special education student teaching experience. An application is required to determine special education student teaching eligibility. See Teacher Education Services or the Office of Field Experiences for deadlines.

EDSP 495	Student Teaching: Special Educ	10
Total Hours		10

Minimum Required Grade: B

This is an advising track only and not an official program as recognized by the University of Montana (UM) or the Montana University System. This information will not appear on your UM transcript, diploma, university lists, student data system, or university publication. You do not fill out a major change for a track.

Technology in Education Licensure Teaching Licensure - Education; Track: Technology in Education

College of ED & Human Sciences

Degree Specific Credits: 21

Required Cumulative GPA: 2.75

Catalog Year: 2017-2018

Note: Technology in Education is an Area of Permissive Special Competency. This minor leads to an area of permissive special competency in technology in education for those holding or attaining a Montana teaching license. It does not qualify as a teaching endorsement in Montana. See the Department of Curriculum and Instruction in the College of Education and Human Sciences for additional information.

Summary

Technology in Education Requirements	21
Total Hours	21

Technology in Education Requirements

Rule: Complete all of the following courses.

Note: Equivalent courses from MSU-Bozeman, MSU-Billings and MSU-Northern may substitute. Please consult a C&I advisor for approved courses.

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

Minimum Required Grade: C-

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.

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 five undergraduate majors in the College are science degrees, leading to a Baccalaureate of Science (B.S.) degree. These majors are:

- Forestry (p. 116);
- Parks, Tourism, and Recreation Management (p. 120);
- Wildlife Biology (p. 130);
- Resource Conservation (p. 123); and
- Ecosystem Science and Restoration (p. 108).

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 (p. 22) 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); Wildlife and People (WILD 105N); or International Forestry (NRSM 170). In the sophomore year most students will take an introductory course in soils to become familiar with the cycling of energy

and nutrients in terrestrial ecosystems while students in the Wildlife Biology major will take coursework in molecular biology and genetics. In their junior year all students take an upper division ecology class. The University's general education requirements and specific College majors ensure all students take additional natural and social science classes to provide the foundations necessary to understand and manage the natural and social systems underlying human uses of natural resources.

Quantitative and Analytical Skills

All students at the College will attain the quantitative analytical and measurement foundations needed for their professional or research career path. The freshmen level quantitative requirement rests on a proficiency in mathematics that is obtained through one of two routes depending on major: a college algebra/linear math/probability track or an introductory calculus track. All sophomore students take a statistics class which many fulfill through a special course in the analysis of multiple forms of measurement of natural resource characteristics, called Biometrics. Although not required for all majors, most students decide to take a special course in mapping that combines the common applications of geographic information systems (GIS) and the basic attributes of spatial analysis.

Applied Field Skills

A tremendous advantage of an education at the W.A Franke College of Forestry and Conservation is the proximity of an unlimited field laboratory in both the managed and untrammelled 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.

Climate Change Studies

Steven Running, Director

Climate Change Studies is an inter-disciplinary program open to all majors. The program educates students in three areas of the climate change issue: science, society, and solutions. Coursework in the minor provides a foundation that enables students to engage the scientific, societal, and political dimensions of global climate change. Further, the focus on solutions with its orientation toward applied learning will help students develop critical thinking and problem solving skills. Participating students will enhance their major field of study. They will be better prepared to enter a broad range of professions and graduate programs where they can meet the emerging challenges and opportunities arising from climate change. Climate Change Studies is a joint program between the W.A Franke College of Forestry and Conservation, College of Arts and Sciences, and Missoula College's Energy Technology program.

Undergraduate Minors

- Climate Change Studies (p. 107)

Climate Change Studies Minor

Nicky Phear, Director

Climate Change Studies is an interdisciplinary program open to all majors. The program educates students in three areas of the climate change issue: science, society, and solutions. Coursework in the minor provides a foundation that enables students to engage the scientific, societal, and political dimensions of global climate change. Further, the focus on solutions with its orientation toward applied learning will help students develop critical thinking and problem solving skills. Participating students will enhance their major field of study. They will be better prepared to enter a broad range of professions and graduate programs where they can meet the emerging challenges and opportunities arising from climate change. Climate Change Studies is a joint program between the Davidson Honors College, W.A Franke College of Forestry and Conservation, College of Humanities and Sciences, and Missoula College.

Minor - Climate Change Studies (Minor)

Davidson Honors College

Degree Specific Credits: 21

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018**Summary**

Required Course	3
Climate Change Science	6
Climate Change and Society	6
Climate Change Solutions	6
Total Hours	21

Required Course**Rule:** must take the following course

CCS 103X	Intro Climate Change:Sci & Soc	3
Total Hours		3

Minimum Required Grade: C-

Climate Change Science

Select at least 6 credits from the following: 6

NRSM 418	Ecosystem Climatology	
ERTH/CCS 303N	Weather and Climate	
NRSM 281	Science of Climate Change	
NRSM/CCS 408	Global Cycles and Climate	
Total Hours		6

Minimum Required Grade: C-

Climate Change and Society

Select at least 6 credits from the following: 6

COMX/CCS 349	Comm Consump & Climate	
ECNS/CCS 445	Int Env Econ & Clim Change	
ENST 367	Environmental Politics & Policies	
ENST 427	Social Issues:The Mekong Delta	
NRSM 426	Climate and Society	
NRSM 449E	Climate Change Ethics/Policy	
PHL 112E	Intro Ethics and Environment	
PSCI 468	Public Policy Cycle and the Climate	
Total Hours		6

Minimum Required Grade: C-

Climate Change Solutions**Rule:** Must take at least 1 course but a total of 6 credits between both categories A and B**Category A: Practical Application**

Select three credits from the following: 3

CCS 395	Special Topics	
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CCS 398	Clmt Change Internship/SERV	
ENST 476	Environmental Citizenship	
Total Hours		3

Minimum Required Grade: C-

Category B

Select 3 credits from the following: 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/CCS 421	Sustainable Cities	
Total Hours		3

Minimum Required Grade: C-

**Ecosystem Science and Restoration
Bachelor of Science in Ecosystem Science
and Restoration**

Ecological restoration # the process of assisting in the repair of damaged ecosystems# is one of the fastest growing areas of natural resource management. With increasing interest, there is a corresponding need for trained professionals who understand not only the science of restoration ecology but also the management practices and social factors that lead to successful project implementation. The W.A Franke College of Forestry and Conservation offers a Bachelor of Science and a minor in Ecosystem Science and Restoration. For more information see the Ecosystem Science and Restoration website (<http://www.cfc.umt.edu/undergrad/restoration/default.php>).

Degree Concentrations**Bachelor of Science in Ecosystem Science and Restoration (Aquatic and Terrestrial Concentrations)**

The major in Ecosystem Science and Restoration prepares students to 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, wetland, and groundwater restoration.

Both concentrations provide in-depth training in the science of restoration ecology and the management activities and human dimensions of restoration practice. Students engage in field-based learning, contribute to cutting-edge restoration projects, and are challenged to apply ecological theory to restoration practice. The major requires completion of a nine-credit restoration capstone, during which students gain hands-on real-world experience planning and implementing restoration projects in partnership with natural resource management agencies and organizations in western Montana.

A degree in Ecosystem Science and Restoration prepares students for careers as restoration practitioners with non-profit, private, or governmental agencies and for graduate school in ecology or natural resource management. Students who graduate with this major may qualify for the following federal civil service jobs:

- biological technician (Series 0404),
- ecologist (Series GS-408),
- forester (Series G-0460),
- hydrologist (Series GS-1315),
- range technician (Series GS-0455), and
- soil conservationist (Series GS-0457).

More information can be found on the federal civil service requirements website (<http://www.opm.gov/qualifications/standards/indexes/alph-ndx.asp>).

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 (p. 109)
- Ecological Sciences & Restoration B.S., Terrestrial Ecosystem Sciences and Restoration Concentration (p. 112)

Undergraduate Minors

- Ecological Restoration (p. 111)

Aquatic Ecosystem Science and Restoration

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 restoration practice. The major requires completion of a nine-credit restoration capstone, during which students gain hands-on real-world experience planning and implementing restoration projects in partnership with natural resource management agencies and organizations in western Montana.

A degree in 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 (<http://www.opm.gov/qualifications/standards/indexes/alph-ndx.asp>) 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: 89

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umd.edu/academics/general-education-requirements>) of the catalog.

Summary

Major Required Courses	9
Outside Major Required Courses	39-40
Major Required Courses	21
Outside Major Required Courses	8
Restoration Aquatic Electives	9
Social Science Elective Courses	3
Writing Requirements	15
Math Requirements for Major	8
Exception to the Modern/Classical Languages Requirement	3-4
Expressive Arts Requirement for Major	3
Social Science	3
Ethical & Human Values Elective within Major	3
Natural Sciences within Major	7
Total Hours	131-133

Major Required Courses

Rule: Must take all courses

NRSM 121S	Nature of Montana	3
or NRSM 170	International Envir. Change	
NRSM 200	Nat.Resource Professional Wrtg	3
NRSM 265	Elements of Ecological Restora	3
Total Hours		9

Minimum Required Grade: C-

Outside Major Required Courses

Rule: Must take all 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	3
CHMY 123	Introduction to Organic and Biochemistry	3
COMX 111A	Intro to Public Speaking	3
or THTR 120A	Introduction to Acting I	
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
WRIT 101	College Writing I	3
Select one of the following:		3-4
STAT 216	Introduction to Statistics	
FORS 201	Forest Biometrics	
WILD 240	Intro to Biostatistics	
Total Hours		39-40

Minimum Required Grade: C-

Major Required Courses

Rule: Must take all 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	Terrestrial Ecosystem Ecology	
NRSM 389E	Ethics Forestry & Conservation	3
NRSM 494	Ecosystem Science and Restoration Seminar	1
NRSM 495	Ecosystem Science and Restoration Practicum	3
Total Hours		21

Minimum Required Grade: C-

Outside Major Required Courses

Rule: Must take all courses

BIOE 370	General Ecology	3
BIOE 428	Freshwater Ecology	5
Total Hours		8

Minimum Required Grade: C-

Restoration Aquatic Electives

Select at least 9 credits from the following:		9
BIOE 342	Field Ecology	
BIOE 439	Stream Ecology	
BIOE 451	Landscape Ecology	

BIOE 447	Terrestrial Ecosystem Ecology	
BIOE 453	Ecology of Small & Large Lakes	
BIOO 340	Biology and Mgmt 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	
NRSM 210N	Soils, Water and Climate	
NRSM 408	Global Cycles and Climate	
NRSM 418	Ecosystem Climatology	
NRSM 455	Riparian Ecology & Management	
NRSM 465	Foundations of Restoration Ecology	
WILD 485	Aquatic Invertebrate Ecology	
Total Hours		9

Minimum Required Grade: C-

Social Science Elective Courses

Rule: must take at least 3 credits

Select at least one of the following:		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 475	Environment & Development	
Total Hours		3

Minimum Required Grade: C-

Writing Requirements

Rule: Must complete the following subcategories

Lower Division Writing

Rule: Complete all courses

NRSM 200	Nat.Resource Professional Wrtg	3
Total Hours		3

Minimum Required Grade: C-

Upper Division Writing

Rule: Must take at least three courses

Select at least 9 credits from the following:		9
BIOE 428	Freshwater Ecology	
FORS 330	Forest Ecology	
NRSM 344	Ecosystem Science and Restoration Capstone	
NRSM 379	Collab in Nat Res Decisions	
NRSM 495	Ecosystem Science and Restoration Practicum	

NRSM 499	Senior Thesis	
Total Hours		9

Minimum Required Grade: C-

Math Requirements for Major

Rule: Must take all courses

M 171	Calculus I	4
M 172	Calculus II	4
Total Hours		8

Minimum Required Grade: C-

Exception to the Modern/Classical Languages Requirement

Rule: The Ecosystem Science and Restoration major has been granted an exception to the Modern/Classical Language Requirement. Must take one of the following courses to will satisfy this requirement.

Select one of the following:		3-4
FORS 201	Forest Biometrics	
STAT 216	Introduction to Statistics	
WILD 240	Intro to Biostatistics	
Total Hours		3-4

Minimum Required Grade: C-

Expressive Arts Requirement for Major

Rule: must take one of the following courses

COMX 111A	Intro to Public Speaking	3
	or THTR 120A Introduction to Acting I	
Total Hours		3

Minimum Required Grade: C-

Social Science

Rule: May take the following course

NRSM 121S	Nature of Montana	3
Total Hours		3

Minimum Required Grade: C-

Ethical & Human Values Elective within Major

Rule: must take one of the following courses

NRSM 449E	Climate Change Ethics/Policy	3
	or NRSM 389E Ethics Forestry & Conservation	
Total Hours		3

Minimum Required Grade: C-

Natural Sciences within Major

Rule: Must take all courses

BIOB 160N	Principles of Living Systems	3
BIOB 161N	Prncpls of Living Systems Lab	1
CHMY 121N	Introduction to General Chemistry	3
Total Hours		7

Minimum Required Grade: C-

Ecological Restoration Minor Minor - Ecological Restoration (Minor)

W.A Franke College of Forestry & Conservation

Degree Specific Credits: 24

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Summary

Major Required Course	9-10
Required Courses	9-11
Natural Science Electives	3-5
Social Science Electives	3
Ethical & Human Values Elective Within Minor	6
Natural Sciences Within Minor	3
Total Hours	33-38

Major Required Course

Rule: must take the following course

Note: FORS 201 can be substituted for either STAT 216 OR WILD 240

Select one of the following:		3-4
FORS 201	Forest Biometrics	
STAT 216	Introduction to Statistics	
WILD 240	Intro to Biostatistics	
NRSM 210N	Soils, Water and Climate	3
NRSM 265	Elements of Ecological Restora	3
Total Hours		9-10

Minimum Required Grade: C-

Required Courses

Rule: Must complete all of the following courses

Note: FORS 330 can be substituted for either BIOE 370 OR BIOE 428 OR NRSM 462; NRSM 385 can be substituted for BIOO 335

Select one of the following:		3-5
FORS 330	Forest Ecology	
BIOE 370	General Ecology	
BIOE 428	Freshwater Ecology	
NRSM 462	Rangeland Ecology	

NRSM 385	Watershed Hydrology	3
or B100 335	Rocky Mountain Flora	
NRSM 465	Foundations of Restoration Ecology	3
Total Hours		9-11

Minimum Required Grade: C-

Natural Science Electives

Rule: Must take one of the following courses, but not a course already used for a core or above requirement

Select one of the following: 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	
B100 335	Rocky Mountain Flora	
B100 340	Biology and Mgmt of Fishes	
B100 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

Minimum Required Grade: C-

Social Science Electives

Rule: take at least one course from the following, but if one of these courses are required for the major a second elective must be taken

Select at least one of the following: 3

ECNS 433	Economics of the Environment	
FORS 320	Forest Environmental Economics	
GPHY 335	Water Policy	
NRSM 379	Collab in Nat Res Decisions	
NRSM 422	Nat Res Policy/Administration	

NRSM 426	Climate and Society	
NRSM 449E	Climate Change Ethics/Policy	
NRSM 475	Environment & Development	
NRSM 389E	Ethics Forestry & Conservation	
PTRM 482	Wilderness & Protctd Area Mgt	
Total Hours		3

Minimum Required Grade: C-

Ethical & Human Values Elective Within Minor

Rule: Can take the elective courses

Note: can take these courses for Social Science Electives in the minor and will work for this General Education Requirement

NRSM 449E	Climate Change Ethics/Policy	3
NRSM 389E	Ethics Forestry & Conservation	3.000
Total Hours		6

Minimum Required Grade: C-

Natural Sciences Within Minor

Rule: must take the following course

NRSM 210N	Soils, Water and Climate	3
Total Hours		3

Minimum Required Grade: C-

Terrestrial Ecosystem Science and Restoration

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 restoration practice. The major requires completion of a nine-credit restoration capstone, during which students gain hands-on real-world experience planning and implementing restoration projects in partnership with natural resource management agencies and organizations in western Montana.

A degree in 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>): <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: 88

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

Major Required Courses	12
Outside Major Required Courses	34-35
Major Required Courses	19-24
Outside Major Required Courses	9
Restoration Terrestrial Electives	9
Restoration Social Science Elective Courses	3
Writing Required for the Major	15
Lower Division Writing	
Upper Division Writing	
Math Requirement for Major	4
Exception to the Modern/Classical Languages Requirement	3-4
Expressive Arts Requirement for Major	3
Social Sciences	3
Ethical & Human Values Elective within Major	3
Natural Sciences within Major	7
Total Hours	124-131

Major Required Courses

Must take all courses

NRSM 121S	Nature of Montana	3
or NRSM 170	International Envir. Change	
NRSM 200	Nat.Resource Professional Wrtg	3
NRSM 210N	Soils, Water and Climate	3
NRSM 265	Elements of Ecological Restora	3
Total Hours		12

Minimum Required Grade: C-

Outside Major Required Courses

Must take all 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
BIOO 105N	Introduction to Botany	3
CHMY 121N	Introduction to General Chemistry	3
CHMY 123	Introduction to Organic and Biochemistry	3
COMX 111A	Intro to Public Speaking	3
or THTR 120A	Introduction to Acting I	
M 162	Applied Calculus	4
WRIT 101	College Writing I	3
Select one of the following:		3-4
STAT 216	Introduction to Statistics	
FORS 201	Forest Biometrics	
WILD 240	Intro to Biostatistics	

Total Hours 34-35

Minimum Required Grade: C-

Major Required Courses

Must take all courses

NRSM 344	Ecosystem Science and Restoration Capstone	5
NRSM 385	Watershed Hydrology	3
NRSM 389E	Ethics Forestry & Conservation	3
or NRSM 449E	Climate Change Ethics/Policy	
NRSM 422	Nat Res Policy/Administration	3
NRSM 465	Foundations of Restoration Ecology	3
or BIOE 447	Terrestrial Ecosystem Ecology	
NRSM 494	Ecosystem Science and Restoration Seminar	1
NRSM 495	Ecosystem Science and Restoration Practicum	1-6

Total Hours 19-24

Minimum Required Grade: C-

Outside Major Required Courses

Note: Can take BIOE 448 OR FORS 330 OR NRSM 462

Must take all courses

BIOE 370	General Ecology	3
BIOO 335	Rocky Mountain Flora	3
Total Hours		6

Minimum Required Grade: C-

Restoration Terrestrial Electives

Note: No Double Dipping with CORE courses

Select at least 9 credits from the following: 9

BIOE 342	Field Ecology
BIOE 416	Alpine Ecology
BIOE 447	Terrestrial 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-

Restoration Social Science Elective Courses

Select at least one of the following: 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 475	Environment & Development

Total Hours 3

Minimum Required Grade: C-

Writing Required for the Major

Rule: Must complete the following subcategories

Lower Division Writing

NRSM 200	Nat.Resource Professional Wrtg	3
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Total Hours 3

Minimum Required Grade: C-

Upper Division Writing

Select at least three of the following: 9

BIOE 428	Freshwater Ecology
FORS 330	Forest Ecology

NRSM 344	Ecosystem Science and Restoration Capstone
NRSM 379	Collab in Nat Res Decisions
NRSM 495	Ecosystem Science and Restoration Practicum
NRSM 499	Senior Thesis

Total Hours 9

Minimum Required Grade: C-

Math Requirement for Major

Rule: Must take all courses

M 162	Applied Calculus	4
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Total Hours 4

Minimum Required Grade: C-

Exception to the Modern/Classical Languages Requirement

Rule: The Ecosystem Science and Restoration major has been granted an exception to the Modern/Classical Language Requirement. Must take one of the following courses to will satisfy this requirement.

Select one of the following: 3-4

FORS 201	Forest Biometrics
STAT 216	Introduction to Statistics
WILD 240	Intro to Biostatistics

Total Hours 3-4

Minimum Required Grade: C-

Expressive Arts Requirement for Major

Rule: must take one of the following courses

COMX 111A	Intro to Public Speaking	3
or THTR 120A	Introduction to Acting I	

Total Hours 3

Minimum Required Grade: C-

Social Sciences

Rule: May take the below course

NRSM 121S	Nature of Montana	3
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Total Hours 3

Minimum Required Grade: C-

Ethical & Human Values Elective within Major

Rule: must take one of the following courses

NRSM 449E	Climate Change Ethics/Policy	3
or NRSM 389E	Ethics Forestry & Conservation	
Total Hours		3

Minimum Required Grade: C-

Natural Sciences within Major

Rule: Must take all courses

BIOB 160N	Principles of Living Systems	3
BIOB 161N	Prncpls of Living Systems Lab	1
CHMY 121N	Introduction to General Chemistry	3
Total Hours		7

Minimum Required Grade: C-

Fire Sciences and Management

Undergraduate Minors

- Fire Sciences & Management (p. 115)

Fire Sciences and Management Minor Minor - Fire Sciences & Management (Minor)

W.A Franke College of Forestry & Conservation

Degree Specific Credits: 24

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Summary

Major Required Course	3
Required Course	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

Major Required Course

Rule: must take the following course

FORS 230	Fire Management & Environmental Change	3
Total Hours		3

Minimum Required Grade: C-

Required Course

Rule: must take the following course

FORS 333	Fire Ecology	3
Total Hours		3

Minimum Required Grade: C-

Ecology Courses

Select one of the following:		3
BIOE 370	General Ecology	
FORS 330	Forest Ecology	
NRSM 462	Rangeland Ecology	
Total Hours		3

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

Select one of the following:		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

Minimum Required Grade: C-

Meteorology or Climate Course

Rule: Must take one of the following courses

ERTH 303N	Weather and Climate	3
or NRSM 418	Ecosystem Climatology	
Total Hours		3

Minimum Required Grade: C-

Measurements & Analysis Electives

Select one of the following:		3
FORS 202	Forest Mensuration	
FORS 350	Forestry Apps of GIS	
FORS 351	Env Remote Sensing	
Total Hours		3

Minimum Required Grade: C-

Natural/Management Science Electives

Rule: Take at least one course from the following, but if one of these courses is required for the major a second elective must be taken

Select at least one of the following:	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
Minimum Required Grade: C-	

Social Science Electives

Rule: Take at least one course from the following, but if one of these courses is required for the major a second elective must be taken

Select at least one of the following:	3
FORS 320 Forest Environmental Economics	
NASX 303E Ecol Persp in Nat Amer Trad	
NRSM 379 Collab in Nat Res Decisions	
NRSM 389E Ethics Forestry & Conservation	
NRSM 422 Nat Res Policy/Administration	
PTRM 482 Wilderness & Protctd Area Mgt	
Total Hours	3
Minimum Required Grade: C-	

Forestry

In addition to special degree requirements listed previously, students selecting the BS Forestry degree must complete the following required courses or their equivalent, if transferred from another college or university. Transference and equivalency will be determined by the University, W.A Franke College of Forestry and Conservation, and Forestry program. Electives may be taken at any time, keeping in mind these requirements as well as the University's General Education requirements for graduation.

Undergraduate

- Forestry B.S., Forest Operations Concentration (p. 116)
- Forestry B.S., Forest Resources Management Concentration (p. 118)

Forest Operations

In addition to special degree requirements listed previously, students selecting the BS Forestry degree must complete the following required courses or their equivalent, if transferred from another college or university. Transference and equivalency will be determined by the University, W.A Franke College of Forestry and Conservation, and Forestry program. Electives may be taken at any time, keeping in mind these

requirements as well as the University's General Education requirements for graduation.

Bachelor of Science - Forestry; Forest Operations Concentration

W.A Franke College of Forestry & Conservation

Degree Specific Credits: 82

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

Major Required Courses	22
Outside Major Courses Required	24-27
Major Required Courses	30
Forest Management Elective	2-3
Resource Protection Electives	3
Ethics and Social Science Elective	3
Writing within Major	15
Math within Major	4-6
Exception to the Modern/Classical Languages Requirement	3-4
Expressive Arts within Major	3
Social Science within Major	3
Ethical & Human Values Elective within Major	3
Natural Science within Major	6
Total Hours	121-128

Major Required Courses

Rule: Must take all courses

FORS 130 Intro Forestry Field Skills	2
FORS 201 Forest Biometrics	3
FORS 202 Forest Mensuration	3
FORS 240 Tree Biology	2
FORS 241N Dendrology	3
FORS 250 Intro to GIS for Forest Mgt	3
NRSM 200 Nat.Resource Professional Wrtg	3
NRSM 210N Soils, Water and Climate	3
Total Hours	22

Minimum Required Grade: C-

Outside Major Courses Required

Rule: Must take all courses

BIOB 160N Principles of Living Systems	3
BIOB 161N Pncpls of Living Systems Lab	1

CHMY 121N	Introduction to General Chemistry	3
COMX 111A	Intro to Public Speaking	3
or THTR 120A	Introduction to Acting I	
ECNS 201S	Principles of Microeconomics	3
Select one of the following:		4-6
M 151	Precalculus	
M 121	College Algebra	
& M 122	and College Trigonometry	
Select one of the following:		4-5
M 162	Applied Calculus	
PHSX 205N	College Physics I	4
WRIT 101	College Writing I	3
Total Hours		28-31

Minimum Required Grade: C-

Major Required Courses

Rule: Must take all courses

FORS 320	Forest Environmental Economics	3
FORS 330	Forest Ecology	3
FORS 340	Forest Product Manufacturing	2
FORS 341	Timber Harvesting & Roads	3
FORS 349	Practice of Silviculture	3
FORS 434	Advanced Forest Roads	3
FORS 435	Advanced Timber Harvesting	3
FORS 436	Project Appraisal	3
FORS 440	Forest Stand Management	3
NRSM 385	Watershed Hydrology	3
NRSM 422	Nat Res Policy/Administration	3
Total Hours		32

Minimum Required Grade: C-

Forest Management Elective

Select at least one of the following:		2-3
FORS 230	Fire Management & Environmental Change	
FORS 232	Forest Insects & Diseases	
NRSM 265	Elements of Ecological Restora	
PTRM 217S	Parks & Outdoor Rec. Mgmt.	
WILD 275	Wildlife Conservation	
Total Hours		2-3

Minimum Required Grade: C-

Resource Protection Electives

Select one of the following:		3
FORS 331	Wildland Fuel Management	
NRSM 360	Rangeland Mgt (equiv 260)	
NRSM 415	Environmental Soil Science	

NRSM 455	Riparian Ecology & Management	
Total Hours		3

Minimum Required Grade: C-

Ethics and Social Science Elective

Select one of the following:		3
NASX 303E	Ecol Persp in Nat Amer Trad	
NRSM 379	Collab in Nat Res Decisions	
NRSM 424	Community Forestry & Conservtn	
NRSM 425	Nat Res & Envir Economics	
NRSM 389E	Ethics Forestry & Conservation	
Total Hours		3

Minimum Required Grade: C-

Writing Within Major

Rule: Must complete the following subcategories

15 Total Credits Required

Lower Division Writing

Rule: Need to take all listed

NRSM 200	Nat.Resource Professional Wrtg	3
WRIT 101	College Writing I	3
Total Hours		6

Minimum Required Grade: C-

Upper Division Writing

Select at least three of the following:		9
FORS 330	Forest Ecology	
FORS 341	Timber Harvesting & Roads	
FORS 349	Practice of Silviculture	
FORS 440	Forest Stand Management	
Total Hours		9

Minimum Required Grade: C-

Math within Major

Rule: All are required

Select one of the following:		4-6
M 151	Precalculus	
M 121	College Algebra	
& M 122	and College Trigonometry	
Total Hours		4-6

Minimum Required Grade: C-

Exception to the Modern/Classical Languages Requirement

Rule: The Forestry major has been granted an exception to the Modern/Classical Language Requirement. Must take one of the following courses to will satisfy this requirement.

FORS 201	Forest Biometrics	3-4
or STAT 216	Introduction to Statistics	
Total Hours		3-4

Minimum Required Grade: C-

Expressive Arts within Major

Rule: Must take one of the following courses

COMX 111A	Intro to Public Speaking	3
or THTR 120A	Introduction to Acting I	
Total Hours		3

Minimum Required Grade: C-

Social Science within Major

Rule: Must take the following course

ECNS 201S	Principles of Microeconomics	3
Total Hours		3

Minimum Required Grade: C-

Ethical & Human Values Elective within Major

Rule: Can take the following elective course

NRSM 389E	Ethics Forestry & Conservation	3
Total Hours		3

Minimum Required Grade: C-

Natural Science within Major

Rule: Must take all courses

CHMY 121N	Introduction to General Chemistry	3
NRSM 210N	Soils, Water and Climate	3
Total Hours		6

Minimum Required Grade: C-

Forest Resources Management B.S. Bachelor of Science - Forestry; Forest Resources Mgmt Concentration

W.A Franke College of Forestry & Conservation

Degree Specific Credits: 90

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

Major Required Courses	22
Outside Major Courses Required	24-27
Major Required Courses	26
Professional Electives	18
Biophysical Sciences	
Management Application	
Policy and Social Science	
Measurement and Analysis	
Writing within Major	14-15
Math within Major	4-6
Exception to the Modern/Classical Languages Requirement	3-4
Expressive Arts Requirement	3
Social Science within Major	3
Ethical & Human Values Elective within Major	3
Natural Sciences within Major	6
Total Hours	126-133

Major Required Courses

Rule: Must take all courses

FORS 130	Intro Forestry Field Skills	2
FORS 201	Forest Biometrics	3
FORS 202	Forest Mensuration	3
FORS 240	Tree Biology	2
FORS 241N	Dendrology	3
FORS 250	Intro to GIS for Forest Mgt	3
NRSM 200	Nat.Resource Professional Wrtg	3
NRSM 210N	Soils, Water and Climate	3
Total Hours		22

Minimum Required Grade: C-

Outside Major Courses Required

Rule: Must take all courses

BIOB 160N	Principles of Living Systems	3
BIOB 161N	Prncpls of Living Systems Lab	1
CHMY 121N	Introduction to General Chemistry	3
COMX 111A	Intro to Public Speaking	3
or THTR 120A	Introduction to Acting I	
ECNS 201S	Principles of Microeconomics	3
Select one of the following:		4-6
M 151	Precalculus	

M 121 & M 122	College Algebra and College Trigonometry	
Select one of the following:		4-5
M 162	Applied Calculus	
PHSX 205N & PHSX 206N	College Physics I and College Physics I Laboratory	
WRIT 101	College Writing I	3
Total Hours		24-27

Minimum Required Grade: C-

Major Required Courses

Rule: Must take all courses

FORS 320	Forest Environmental Economics	3
FORS 330	Forest Ecology	3
FORS 340	Forest Product Manufacturing	2
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		26

Minimum Required Grade: C-

Professional Electives

Rule: Must take at least 18 total credits from the combined subcategories

Note: Must take 6 credits beyond major requirements to earn a minor

Minimum Required Grade: C-

18 Total Credits Required

Biophysical Sciences

Select at least one of the following:		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

Minimum Required Grade: C-

Management Application

Select at least two of the following:		4-6
FORS 230	Fire Management & Environmental Change	
FORS 232	Forest Insects & Diseases	
FORS 331	Wildland Fuel Management	
FORS 434	Advanced Forest Roads	
FORS 435	Advanced Timber Harvesting	

NRSM 360	Rangeland Mgt (equiv 260)	
WILD 275	Wildlife Conservation	
Total Hours		4-6

Minimum Required Grade: C-

Policy and Social Science

Select at least one of the following:		3
ENST 230H	Nature and Society	
FORS 436	Project Appraisal	
NASX 303E	Ecol Persp in Nat Amer Trad	
NRSM 370S	Wildland Conserv Pol/Govrnance	
NRSM 379	Collab in Nat Res Decisions	
NRSM 389E	Ethics Forestry & Conservation	
NRSM 424	Community Forestry & Conservtn	
NRSM 425	Nat Res & Envir Economics	
NRSM 426	Climate and Society	
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 & Protctd Area Mgt	
Total Hours		3

Minimum Required Grade: C-

Measurement and Analysis

Select at least one of the following:		2-3
FORS 350	Forestry Apps of GIS	
FORS 351	Env Remote Sensing	
GEO 421	Hydrology	
Total Hours		2-3

Minimum Required Grade: C-

Writing within Major

Rule: Must complete the following subcategories

15 Total Credits Required

Lower Division Writing

Rule: All are required

NRSM 200	Nat.Resource Professional Wrtg	3
WRIT 101	College Writing I	3
Total Hours		6

Minimum Required Grade: C-

Upper Division Writing

Select at least three of the following:		8-9
FORS 330	Forest Ecology	
FORS 340	Forest Product Manufacturing	

FORS 341	Timber Harvesting & Roads	
FORS 349	Practice of Silviculture	
Total Hours		8-9

Minimum Required Grade: C-

Math within Major

Select one of the following:		4-6
M 151	Precalculus	
M 121	College Algebra	
& M 122	and College Trigonometry	
Total Hours		4-6

Minimum Required Grade: C-

Exception to the Modern/Classical Languages Requirement

Rule: The Forestry major has been granted an exception to the Modern/Classical Language Requirement. Must take one of the following courses to will satisfy this requirement.

FORS 201	Forest Biometrics	3-4
or STAT 216	Introduction to Statistics	
Total Hours		3-4

Minimum Required Grade: C-

Expressive Arts Requirement

COMX 111A	Intro to Public Speaking	3
or THTR 120A	Introduction to Acting I	
Total Hours		3

Minimum Required Grade: C-

Social Science within Major

Rule: Must take the following course

ECNS 201S	Principles of Microeconomics	3
Total Hours		3

Minimum Required Grade: C-

Ethical & Human Values Elective within Major

Rule: Can take the elective course

NRSM 389E	Ethics Forestry & Conservation	3
Total Hours		3

Minimum Required Grade: C-

Natural Sciences within Major

Select at least two of the following including a lab course: 6

BIOB 160N	Principles of Living Systems	
BIOB 161N	Prncpls of Living Systems Lab	
CHMY 121N	Introduction to General Chemistry	
FORS 241N	Dendrology	
NRSM 210N	Soils, Water and Climate	
Total Hours		6

Minimum Required Grade: C-

Geographic Information Systems Undergraduate Certificates

- Geographic Information Systems Certificate (p. 236)

Parks, Tourism, and Recreation Management

The B.S. in Parks, Tourism & Recreation Management degree is designed to prepare students for professional positions developing and managing nature-based recreation experiences and park resources for public land management agencies, nonprofit organizations, and the nature-based tourism industry. Students pursuing this degree must choose between an 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.

Undergraduate Degrees

- Parks, Tourism & Recreation Management B.S. (p. 120)

Parks, Tourism, and Recreation Management B.S.

The B.S. in Parks, Tourism & Recreation Management degree is designed to prepare students for professional positions developing and managing nature-based recreation experiences and park resources for public land management agencies, nonprofit organizations, and the nature-based tourism industry. Students pursuing this degree must choose between a 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 option is designed to combine an understanding of social, cultural, political, environmental, and

economic contexts surrounding tourism in a natural resource setting. All students learn the processes and conceptual skills needed to determine alternative management strategies, make management decisions, and carry out management programs. Included are courses leading to an understanding of the basic ecological characteristics of recreational lands. Students also take courses dealing with human behavior and management. Emphasis is placed on presenting problems that would be encountered while managing national parks and forests, state and regional parks, wilderness areas, and other recreation resources of international and national significance.

Bachelor of Science - Parks, Tourism & Rec Management

W.A Franke College of Forestry & Conservation

Degree Specific Credits: 75

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Note: There are no longer "degree options". Students can design their own elective choices with an advisor.

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umn.edu/academics/general-education-requirements>) of the catalog.

Summary

Major Required Courses	15
Outside Major Required Courses	28-29
Major Required Courses	28
Writing Within Major	9
Math within Major	3
Exception to the Modern/Classical Languages Requirement	3-4
Expressive Arts Requirement	3
Social Science within Major	3
Ethical & Human Values Elective within Major	3
Natural Sciences within Major	6
Total Hours	101-103

Major Required Courses

Rule: Must take all courses

NRSM 121S	Nature of Montana	3
NRSM 200	Nat.Resource Professional Wrtg	3
NRSM 210N	Soils, Water and Climate	3
PTRM 210S	Nature Tourism & Comm Rec	3
PTRM 217S	Parks & Outdoor Rec. Mgmt.	3
Total Hours		15

Minimum Required Grade: C-

Outside Major Required Courses

Rule: Must take all courses

ACTG 201	Principles of Financial Accounting	3
ACTG 202	Principles of Managerial Accounting	3
Select one of the following:		3
BIOB 170N	Princpls Biological Diversity	
BIOE 172N	Introductory Ecology	3
BIOO 105N	Introduction to Botany	3
COMX 111A	Intro 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
Select one of the following:		3-4
STAT 216	Introduction to Statistics	
SOCI 202	Social Statistics	
FORS 201	Forest Biometrics	
WRIT 101	College Writing I	3
Total Hours		33-34

Minimum Required Grade: C-

Major Required Courses

Rule: Must take all courses

FORS 330	Forest Ecology	3
or NRSM 462	Rangeland Ecology	
NRSM 422	Nat Res Policy/Administration	3
or WILD 410	Wildlife Policy & Biopolitics	
PTRM 300	Recreation Behavior	3
PTRM 310	Nat Res Interp and Comm	3
PTRM 380	Rec Admin & Leadership	3
PTRM 482	Wilderness & Protctd Area Mgt	3
or PTRM 451	Tourism & Sustainability	
PTRM 484	PTRM Field Measurement Tech	3
PTRM 485	Recreation Planning	3
PTRM 495	Practicum in PTRM	4
Total Hours		28

Skills Courses

Select at least 3 credits from the following: 3

ECP 120	Emergency Medical Responder Lecture	
& ECP 121	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

Alternatively, students can take two semesters of a foreign language.

Minimum Required Grade: C-

Writing Within Major**Rule:** Must complete the following subcategories

9 Total Credits Required

Lower Division Writing**Rule:** Must take all courses

NRSM 200	Nat.Resource Professional Wrtg	3
WRIT 101	College Writing I	3
Total Hours		6

Minimum Required Grade: C-

Upper Division Writing**Rule:** Must take one of the following courses

PTRM 451	Tourism & Sustainability	3
or PTRM 482	Wilderness & Protctd Area Mgt	
Total Hours		3

Minimum Required Grade: C-

Math within Major**Rule:** Must take all courses

M 115	Probability and Linear Mathematics	3
Total Hours		3

Minimum Required Grade: C

Exception to the Modern/Classical Languages Requirement

Rule: The Parks, Tourism, and Recreation Management major has been granted an exception to the Modern/Classical Language Requirement. Must take one of the following courses to will satisfy this requirement.

Select one from the following:		3
FORS 201	Forest Biometrics	
SOCI 202	Social Statistics	
STAT 216	Introduction to Statistics	
Total Hours		3

Minimum Required Grade: C-

Expressive Arts Requirement

COMX 111A	Intro to Public Speaking	3
or THTR 120A	Introduction to Acting I	
Total Hours		3

Minimum Required Grade: C-

Social Science within Major**Rule:** must take the following course

PTRM 217S	Parks & Outdoor Rec. Mgmt.	3
Total Hours		3

Minimum Required Grade: C-

Ethical & Human Values Elective within Major**Rule:** CAN take the elective course

NRSM 389E	Ethics Forestry & Conservation	3
Total Hours		3

Minimum Required Grade: C-

Natural Sciences within Major**Rule:** Must take NRSM 210N and one of the biology courses

NRSM 210N	Soils, Water and Climate	3
Select one of the following:		3
BIOB 170N	Princpls Biological Diversity	
BIOE 172N	Introductory Ecology	
BIOO 105N	Introduction to Botany	
Total Hours		6

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.

ANTY 101H	Anthro & the Human Experience	3
BMKT 325	Principles of Marketing	3
BMKT 337	Consumer Behavior	3
COMX 220S	Intro to Organizational Comm	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	Cultural Ecology	3
NRSM 121S	Nature of Montana	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

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.

BMGT 401	Event Management	3
COMX 115S	Introduction to Interpersonal Communications	3
COMX 220S	Intro to Organizational Comm	3
COMX 421	Comm in Non-Profit Organizatns	3
ENST 225	Community & Environment	3
ENST 230H	Nature and Society	3
GPHY 121S	Human Geography	3
NASX 180	Event Planning	3
NRSM 121S	Nature of Montana	3
NRSM 379	Collab in Nat Res Decisions	3
PSCI 460	Exp Offering: Public Admin	1-9
PSCI 467	Adv Nonprofit Adm	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

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.

CHMY 121N	Introduction to General Chemistry	3
COMX 421	Comm in Non-Profit Organizatns	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	Cultural Ecology	3
NRSM 121S	Nature of Montana	3
NRSM 265	Elements of Ecological Restora	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

Minimum Required Grade: C-

Resource Conservation

Laurie Yung, Associate Professor, Resource Conservation Program Director

The challenging and rapidly evolving field of environmental conservation requires broad training and the ability to integrate and communicate across disciplines. Resource Conservation is an interdepartmental undergraduate major that prepares students for the diverse opportunities that now exist in environmental conservation, natural resource management, and sustainable livelihoods and communities. Students can choose a more structured area of study in the natural sciences, such as ecology or hydrology, or emphasize emerging sub-disciplines such as wildland fire management, natural resource economics, or climate and environmental change. Students can also integrate across disciplines and focus on environmental policy and natural resources planning, wilderness studies, sustainable livelihoods and community conservation, or international conservation. Please go to the Resource Conservation website (<http://www.cfc.umt.edu/rc>) 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.

Undergraduate

- Resource Conservation B.S. (p. 123)

Resource Conservation B.S.

Laurie Yung, Associate Professor, Resource Conservation Program Director

The challenging and rapidly evolving field of environmental conservation requires broad training and the ability to integrate and communicate across disciplines. Resource Conservation is an interdepartmental undergraduate major that prepares students for the diverse opportunities that now exist in environmental conservation, natural resource management, and sustainable livelihoods and communities. Students can choose a more structured area of study in the natural sciences, such as ecology or hydrology, or emphasize emerging sub-disciplines such as wildland fire management, natural resource economics, or climate and environmental change. Students can also integrate across disciplines and focus on environmental policy and natural resources planning, wilderness studies, sustainable livelihoods and community conservation, or international conservation. Please go to the Resource Conservation website (<http://www.cfc.umt.edu/rc>) 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 Specific Credits: 43

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018**General Education Requirements**

Information regarding these requirements can be found in the General Education Section (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

Professional Writing	3
Chemistry	3
Quantitative and Spatial Analysis	9-12
Biology	3-4
Communication	3
Physical Science	3
Ecology	3
Policy	3
Social Science	3
Ethics	3
Additional Required Courses	46
Writing	15
Math	3-4
Exception to the Modern/Classical Languages Requirement	3-4
Expressive Arts	3
Ethical & Human Values	3
Natural Sciences in Major	6
Total Hours	115-121

Professional Writing

Rule: Must take the following course

NRSM 200	Nat.Resource Professional Wrtg	3
Total Hours		3

Minimum Required Grade: C-

Chemistry

Rule: Must take the following course

CHMY 121N	Introduction to General Chemistry	3
Total Hours		3

Minimum Required Grade: C-

Quantitative and Spatial Analysis

Rule: Three courses are required

Note: FORS 250 is highly recommended

Select one of the following:	3-4
FORS 201	Forest Biometrics
STAT 216	Introduction to Statistics
SOCI 202	Social Statistics

Select two of the following: 6-8

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	9-12

Minimum Required Grade: C-

Biology

Select one of the following: 3-4

BIOB 160N	Principles of Living Systems
& BIOB 161N	and Prncpls of Living Systems Lab
BIOB 170N	Prncpls Biological Diversity
BIOE 172N	Introductory Ecology
BIOO 105N	Introduction to Botany

Total Hours 3-4

Minimum Required Grade: C-

Communication

COMX 111A	Intro to Public Speaking	3
or THTR 120A	Introduction to Acting I	

Total Hours 3

Minimum Required Grade: C-

Physical Science

Rule: Must take the following course

NRSM 210N	Soils, Water and Climate	3
Total Hours		3

Minimum Required Grade: C-

Ecology

Select one of the following: 3

BIOE 370	General Ecology
FORS 330	Forest Ecology
NRSM 462	Rangeland Ecology

Total Hours 3

Minimum Required Grade: C-

Policy

Select one of the following: 3

NRSM 370S	Wildland Conserv Pol/Govrnance
NRSM 422	Nat Res Policy/Administration

WILD 410	Wildlife Policy & Biopolitics	
Total Hours		3

Minimum Required Grade: C-

Social Science

Select one of the following: 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

Minimum Required Grade: C-

Ethics

NRSM 449E	Climate Change Ethics/Policy	3
or NRSM 389E	Ethics Forestry & Conservation	

Total Hours 3

Minimum Required Grade: C-

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-

Writing

Rule: Must take both lower-division courses (WRIT 101 and NRSM 200) and at least 3 courses at the upper-division level listed below

Note: The following courses count for the entire upper-division writing requirement (only one course is required): PTRM 451, PTRM 482.

Select at least three of the following: 9

BIOE 428	Freshwater Ecology	
FORS 330	Forest Ecology	

FORS 341	Timber Harvesting & Roads	
FORS 347	Multiple Resource Silviculture	
FORS 349	Practice of Silviculture	
FORS 440	Forest Stand Management	
FORS 499	Senior Thesis	
NASX 403	Contmp Tribal Resource Issues	
NRSM 200	Nat.Resource Professional Wrtg	
NRSM 379	Collab in Nat Res Decisions	
NRSM 389E	Ethics Forestry & Conservation	
NRSM 426	Climate and Society	
NRSM 449E	Climate Change Ethics/Policy	
NRSM 462	Rangeland Ecology	
NRSM 475	Environment & Development	
NRSM 495	Ecosystem Science and Restoration Practicum	
NRSM 499	Senior Thesis	
PTRM 300	Recreation Behavior	
WILD 410	Wildlife Policy & Biopolitics	
WRIT 101	College Writing I	

Total Hours 9

Minimum Required Grade: C-

Math

Select one of the following: 3-4

M 115	Probability and Linear Mathematics	
M 121	College Algebra	
M 122	College Trigonometry	
M 151	Precalculus	
M 162	Applied Calculus	

Total Hours 3-4

Minimum Required Grade: C-

Exception to the Modern/Classical Languages Requirement

Rule: The Resource Conservation major has been granted an exception to the Modern/Classical Language Requirement. Must take one of the following courses to will satisfy this requirement.

Select one of the following: 3-4

FORS 201	Forest Biometrics	
SOCI 202	Social Statistics	
STAT 216	Introduction to Statistics	

Total Hours 3-4

Minimum Required Grade: C-

Expressive Arts

COMX 111A	Intro to Public Speaking	3
or THTR 120A	Introduction to Acting I	

Total Hours 3

Minimum Required Grade: C-

Ethical & Human Values

NRSM 449E	Climate Change Ethics/Policy	3
or NRSM 389E	Ethics Forestry & Conservation	
Total Hours		3

Minimum Required Grade: C-

Natural Sciences in Major

Rule: Must take all courses

CHMY 121N	Introduction to General Chemistry	3
NRSM 210N	Soils, Water and Climate	3
Total Hours		6

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.

Climate & Environmental Change

Rule: Can take these track courses

Note: More detailed information about the Climate & Environmental Change track can be found on our website (<http://www.cfc.umt.edu/rc>): www.cfc.umt.edu/rc (<http://www.cfc.umt.edu/rc>). Students in this track typically complete the Climate Change Minor (<http://www.cfc.umt.edu/ccs>) (www.cfc.umt.edu/ccs) (<http://www.cfc.umt.edu/ccs>). Please talk with your faculty advisor about which courses to take in this track.

CCS 103X	Intro Climate Change:Sci & Soc	3
CCS 352	Climate Field Studies	3
CCS 398	Clmt Change Internship/SERV	2-4
COMX 349	Comm Consump & Climate	3
ECNS 445	Int Env Econ & Clim Change	3
FORS 232	Forest Insects & Diseases	2
FORS 333	Fire Ecology	3
GPHY 335	Water Policy	3
NRSM 379	Collab in Nat Res Decisions	3
NRSM 385	Watershed Hydrology	3
NRSM 408	Global Cycles and Climate	3
NRSM 415	Environmental Soil Science	3
NRSM 418	Ecosystem Climatology	3
NRSM 426	Climate and Society	3
NRSM 449E	Climate Change Ethics/Policy	3
PSCI 324	Climate Policies: China & U.S.	3
Total Hours		46-48

Minimum Required Grade: C-

Ecology of Terrestrial Ecosystems

Rule: Can take these track courses

Note: Suggested courses for Ecology of Terrestrial Ecosystems. Please see more detailed description of this track online and talk with your faculty advisor about which courses to take in this track.

BIOB 170N	Princpls Biological Diversity	3
BIOB 272	Genetics and Evolution	4
BIOB 480	Conservation Genetics	3
BIOE 370	General Ecology	3
BIOE 428	Freshwater Ecology	5
BIOE 449	Plant Biogeography	3
BIOO 320	General Botany	5
BIOO 335	Rocky Mountain Flora	3
BIOO 433	Plant Physiology	3
CHMY 123	Introduction to Organic and Biochemistry	3
ECNS 201S	Principles of Microeconomics	3
FORS 240	Tree Biology	2
FORS 241N	Dendrology	3
FORS 330	Forest Ecology	3
FORS 347	Multiple Resource Silviculture	3
GEO 101N	Introduction to Physical Geology	3
M 162	Applied Calculus	4
NRSM 265	Elements of Ecological Restora	3
NRSM 385	Watershed Hydrology	3
NRSM 408	Global Cycles and Climate	3
NRSM 415	Environmental Soil Science	3
NRSM 418	Ecosystem Climatology	3
NRSM 455	Riparian Ecology & Management	3
NRSM 462	Rangeland Ecology	3
PHSX 205N	College Physics I	4
PHSX 206N	College Physics I Laboratory	1
STAT 216	Introduction to Statistics	4
WILD 275	Wildlife Conservation	2
Total Hours		88

Minimum Required Grade: C-

Environmental Policy & Resources Planning

Rule: Can take these track courses

Note: Suggested courses in Environmental Policy and Resources Planning. Please see more detailed description of this track online and talk with your faculty advisor about which courses to take in this track.

ECNS 201S	Principles of Microeconomics	3
ECNS 202S	Principles of Macroeconomics	3
ECNS 433	Economics of the Environment	3
ENST 367	Environmental Politics & Policies	3
ENST 382	Environmental Law	3
FORS 320	Forest Environmental Economics	3
GPHY 335	Water Policy	3
GPHY 465	Planning Principles & Processes	3

GPHY 466	Environmental Planning	3
NRSM 121S	Nature of Montana	3
NRSM 379	Collab in Nat Res Decisions	3
NRSM 389E	Ethics Forestry & Conservation	3
NRSM 422	Nat Res Policy/Administration	3
NRSM 424	Community Forestry & Conservtn	3
NRSM 425	Nat Res & Envir Economics	3
NRSM 449E	Climate Change Ethics/Policy	3
PSCI 210S	Intro to American Government	3
PSCI 332	Global Environmental Pol.	3
PSCI 361	Public Administration	3
PSCI 461	Administrative Law	3
WILD 275	Wildlife Conservation	2
WILD 410	Wildlife Policy & Biopolitics	3
Total Hours		65

Minimum Required Grade: C-

International Conservation

Rule: Can take these track courses

Note: Students in this track typically complete the International Development Studies Minor (<https://www.cas.umt.edu/IDS>) (<http://www.cas.umt.edu/IDS>). More detailed information about the International Conservation track can be found on our website (<https://www.cfc.umt.edu/rc>): www.cfc.umt.edu/rc (<http://www.cfc.umt.edu/rc>). Please talk with your faculty advisor about which courses to take in this track.

ENST 225	Community & Environment	3
ENST 396	Supervised Internship (PEAS)	10
ENST 480	Food, Agriculture, Environment	3
ENST 487	Globalization, Justice & Environment	3
ENST 493	Study Abroad: Environmental Justice Latin America	3
GPHY 432	Human Role Environmental Change	3
GPHY 434	Food and Famine	3
NRSM 170	International Envir. Change	3
NRSM 379	Collab in Nat Res Decisions	3
NRSM 424	Community Forestry & Conservtn	3
NRSM 475	Environment & Development	3
PTRM 345X	Sustaining Human Soc & Nat Env	3-6
PTRM 353	Tourism, Livelihoods and Sustainability in Mountains	3
PTRM 451	Tourism & Sustainability	3
WILD 460	Internat Wildlife Cons Issues	2
Total Hours		51-54

Minimum Required Grade: C-

Natural Resource Economics

Rule: Can take these track courses

Note: Suggested courses in Natural Resource Economics. Please see more detailed description of this track online and talk with your faculty advisor about which courses to take in this track.

ANTY 326E	Indigenous Peoples & the Ethics of Development	3
ECNS 201S	Principles of Microeconomics	3
ECNS 202S	Principles of Macroeconomics	3
ECNS 217X	Issues in Economic Development	3
ECNS 301	Intermediate Micro with Calc	3
ECNS 302	Intermediate Macroeconomics	3
ECNS 403	Introduction to Econometrics	4
ECNS 433	Economics of the Environment	3
ECNS 445	Int Env Econ & Clim Change	3
ENST 230H	Nature and Society	3
ENST 480	Food, Agriculture, Environment	3
FORS 320	Forest Environmental Economics	3
FORS 436	Project Appraisal	3
GPHY 323S	Economic Geography of Rural Areas	3
M 162	Applied Calculus	4
NRSM 121S	Nature of Montana	3
NRSM 379	Collab in Nat Res Decisions	3
NRSM 389E	Ethics Forestry & Conservation	3
NRSM 424	Community Forestry & Conservtn	3
NRSM 425	Nat Res & Envir Economics	3
SOCI 101S	Introduction to Sociology	3
SOCI 470	Environmental Sociology	3
SOCI 471	Gender and Global Development	3
WILD 275	Wildlife Conservation	2
Total Hours		73

Minimum Required Grade: C-

Range Management & Grassland Ecology

Rule: Can take these track courses

Note: Suggested courses in Range Management & Grassland Ecology. Please see more detailed description of this track online and talk with your faculty advisor about which courses to take in this track.

BIOE 370	General Ecology	3
BIOE 447	Terrestrial Ecosystem Ecology	3
BIOE 458	Forest and Grassland Ecol	3
BIOO 105N	Introduction to Botany	3
BIOO 335	Rocky Mountain Flora	3
BIOO 433	Plant Physiology	3
ECNS 201S	Principles of Microeconomics	3
FORS 230	Fire Management & Environmental Change	3
FORS 250	Intro to GIS for Forest Mgt	3
FORS 333	Fire Ecology	3
GPHY 335	Water Policy	3
NRSM 121S	Nature of Montana	3
NRSM 265	Elements of Ecological Restora	3
NRSM 360	Rangeland Mgt (equiv 260)	3

NRSM 379	Collab in Nat Res Decisions	3
NRSM 385	Watershed Hydrology	3
NRSM 462	Rangeland Ecology	3
WILD 275	Wildlife Conservation	2

Minimum Required Grade: C-

Sustainable Livelihoods and Community Conservation

Rule: Can take these track courses

Note: Suggested courses in Sustainable Livelihoods and Community Conservation. Please see more detailed description of this track online and talk with your faculty advisor about which courses to take in this track.

COMX 347	Rhetoric Nature & Environmtlsm	3
ECNS 433	Economics of the Environment	3
ENST 225	Community & Environment	3
ENST 480	Food, Agriculture, Environment	3
ENST 489S	Environmental Justice Issues & Solutions	3
GPHY 323S	Economic Geography of Rural Areas	3
GPHY 432	Human Role Environmental Change	3
GPHY 468	Community & Regional Analysis	3
NRSM 170	International Envir. Change	3
NRSM 379	Collab in Nat Res Decisions	3
NRSM 424	Community Forestry & Conservtn	3
NRSM 475	Environment & Development	3
PHL 422	Environmental Philosophy	3
PTRM 451	Tourism & Sustainability	3
SOCI 220S	Race, Gender & Class	3
SOCI 270	Intro Development Sociology	3
SOCI 350	The Community	3
SOCI 443	Sociology of Poverty	3
SOCI 470	Environmental Sociology	3
SOCI 471	Gender and Global Development	3
Total Hours		60

Minimum Required Grade: C-

Water Resources

Rule: Can take these track courses

Note: Suggested courses in Water Resources. Please see more detailed description of this track online and talk with you faculty advisor about which courses to take in this track.

BIOE 428	Freshwater Ecology	5
GEO 101N	Introduction to Physical Geology	3
GEO 102N	Introduction to Physical Geology Lab	1
GEO 420	Hydrogeology	4
GEO 421	Hydrology	3
GEO 460	Process Geomorphology	4
GPHY 335	Water Policy	3
M 172	Calculus II	4
M 171	Calculus I	4

NRSM 385	Watershed Hydrology	3
NRSM 415	Environmental Soil Science	3
PHSX 205N	College Physics I	4
PHSX 206N	College Physics I Laboratory	1
PHSX 207N	College Physics II	4
PHSX 208N	College Physics II Laboratory	1

Total Hours 47

Minimum Required Grade: C-

Wilderness Studies

Rule: Can take these track courses

Note: To complete this track students must enroll in the Wilderness and Civilization Program. For information and an application (<http://www.cfc.umt.edu/wc>) see www.cfc.umt.edu/wc (<http://www.cfc.umt.edu/wc>). Please talk to a faculty advisor about additional coursework in this track.

ARTZ 394A	Seminar- Environmental Drawing	3
LIT 280L	Ecology of Literature	3
MUSI 304A	Sound in the Natural World	3
NASX 303E	Ecol Persp in Nat Amer Trad	3
NRSM 271N	Conservation Ecology	3
NRSM 273	Wilderness/Civ Field Stds	1-3
NRSM 370S	Wildland Conserv Pol/Govrnance	3
NRSM 371	Wilderness Issues Lect Series	1
NRSM 373	Wilderness and Civilization	3
NRSM 398	Internship	1-6

Minimum Required Grade: C-

Wildland Fire Management

Rule: Can take these track courses

Note: Student in this track typically complete the Wildland Fire Sciences & Management Minor (<http://www.cfc.umt.edu/FireSciences>) (www.cfc.umt.edu/FireSciences (<http://www.cfc.umt.edu/FireSciences>)). Please see more detailed description of this track online and talk with your faculty advisor about which courses to take.

ECNS 201S	Principles of Microeconomics	3
ERTH 303N	Weather and Climate	3
FORS 202	Forest Mensuration	3
FORS 232	Forest Insects & Diseases	2
FORS 230	Fire Management & Environmental Change	3
FORS 241N	Dendrology	3
FORS 320	Forest Environmental Economics	3
FORS 331	Wildland Fuel Management	3
FORS 333	Fire Ecology	3
FORS 341	Timber Harvesting & Roads	3
FORS 347	Multiple Resource Silviculture	3
FORS 351	Env Remote Sensing	3
FORS 481	Forest Planning	3
FORS 495	Wildland RxFire Practicum	3

FORS 533	Use Fire Wildland Mgmt	3
GEO 101N	Introduction to Physical Geology	3
NRSM 265	Elements of Ecological Restora	3
NRSM 385	Watershed Hydrology	3
NRSM 422	Nat Res Policy/Administration	3
PHSX 205N	College Physics I	4
PHSX 206N	College Physics I Laboratory	1
Total Hours		61

Minimum Required Grade: C-

Wilderness Studies

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.

Undergraduate Minors

- Wilderness Studies (p. 129)

Wilderness Studies Minor

Natalie Dawson, Director of Wilderness Institute

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Students must apply for admission to the Wilderness and Civilization program, which is limited to 25 students each year. Applicants must have a cumulative GPA of 3.0 or higher for all college and university work. Applications are due by April 1 and are available at the Wilderness Institute, University Hall 303.

Minor - Wilderness Studies (Minor)

W.A Franke College of Forestry & Conservation

Degree Specific Credits: 24

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Note: This minor can be completed during a fall semester plus one intersession course and four credits in the spring; Experiential learning credit for Honors will be completed with this minor.

Summary

Required courses	6
Required Courses	19
Total Hours	25

Required Courses

Rule: must take the following courses

Note: NRSM 271N is an Honors course; NRSM 273 will be taken two times fall for 2 credits and spring for 1 credit

NRSM 271N	Conservation Ecology	3
NRSM 273	Wilderness/Civ Field Stds	3
Total Hours		6

Minimum Required Grade: C-

Required Courses

Rule: must take the following courses

LIT 373	Lit & Environment	3
MUSI 304A	Sound in the Natural World	3

NASX 303E	Ecol Persp in Nat Amer Trad	3
NRSM 370S	Wildland Conserv Pol/Govrnance	3
NRSM 371	Wilderness Issues Lect Series	1
NRSM 373	Wilderness and Civilization	3
NRSM 398	Internship	3
Total Hours		19

Minimum Required Grade: C-

Wildlife Biology

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.

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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.

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.

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 (p. 130)
- Wildlife Biology B.S., Terrestrial Wildlife Biology Concentration (p. 132)

Undergraduate Minors

- Wildlife Biology (p. 134)

Aquatic Wildlife Biology

Chad Bishop, Wildlife Biology Director

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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.

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: 84

Required Cumulative GPA: 2.5

Catalog Year: 2017-2018

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 (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

Major Required Courses	20-21
Outside Major Required Courses	24-26
Major Required Courses	46
Writing Requirement	12-18
Mathematics Requirement	4
Symbolic Systems	8
Expressive Arts	3
Natural Sciences Requirement	12
Total Hours	129-138

Major Required Courses

Rule: Must take all courses

Note: Can take WRIT 325 (Honors) in place of NRSM 200

One out of the four is required: BIOE 406/BIOE 409, BIOM 427/BIOM 428, BIOO 462, WILD 485

Select one of the following:	3-4	
BIOE 406 & BIOE 409	Behavior & Evolution and Behavior & Evolution Discussion	4
BIOM 427 & BIOM 428	General Parasitology and General Parasitology Lab	4
BIOO 462	Entomology	4
WILD 485	Aquatic Invertebrate Ecology	3
BIOB 160N	Principles of Living Systems	1
BIOB 161N	Prncpls of Living Systems Lab	4
BIOB 260	Cellular and Molecular Biology	4
BIOB 272	Genetics and Evolution	3
NRSM 200 or WRIT 325	Nat.Resource Professional Wrtg Science Writing	2
WILD 180	Careers in Wildlife Biology	20-21
Total Hours		

Minimum Required Grade: C-

Outside Major Required Courses

Rule: Must take all courses

BIOE 406 & BIOE 409	Behavior & Evolution and Behavior & Evolution Discussion	4
BIOM 427 & BIOM 428	General Parasitology and General Parasitology Lab	4
BIOO 462	Entomology	4
WILD 485	Aquatic Invertebrate Ecology	3
CHMY 121N	Introduction to General Chemistry	3
CHMY 123	Introduction to Organic and Biochemistry	3
CHMY 124	Introduction to Organic and Biochemistry Lab	2
COMX 111A	Intro to Public Speaking	3
M 162	Applied Calculus	4
NRSM 200	Nat.Resource Professional Wrtg	3
STAT 216 or WILD 240	Introduction to Statistics Intro to Biostatistics	3-4
WRIT 101	College Writing I	3
Total Hours		39-40

Minimum Required Grade: C-

Major Required Courses

Rule: Must take all courses

BIOE 370	General Ecology	3
BIOE 371	Gen Ecology Lab (equiv to 271)	2
BIOE 428	Freshwater Ecology	5
BIOM 427	General Parasitology	2
BIOM 428	General Parasitology Lab	2
BIOO 320	General Botany	5
BIOO 340	Biology and Mgmt of Fishes	4
BIOO 462	Entomology	4
NRSM 385	Watershed Hydrology	3
WILD 346	Wildlife Physiological Ecology	3
WILD 408	Advanced Fisheries	3
WILD 410 or NRSM 422	Wildlife Policy & Biopolitics Nat Res Policy/Administration	3
WILD 480	The Upshot--Appld Wildlife Mgt	3
WILD 485	Aquatic Invertebrate Ecology	3
WILD 494	Senior Wildlife Seminar	1
Total Hours		46

Minimum Required Grade: C-

Writing Requirement

Rule: Must complete the following subcategories

12-18 Total Credits Required

Lower Division Writing

Rule: Complete all of the following courses

WRIT 101	College Writing I	3
Select one of the following:		3
NRSM 200	Nat.Resource Professional Wrtg	
WRIT 325	Science Writing (honors)	
WRIT 201	College Writing II	
Total Hours		6

Minimum Required Grade: C-

Upper Division Writing

BIOE 371	Gen Ecology Lab (equiv to 271)	2
Select two of the following:		4-10
BIOE 428	Freshwater Ecology	
BIOO 320	General Botany	
BIOO 470	Ornithology	
BIOO 475	Mammalogy	
WILD 408	Advanced Fisheries	
WILD 470	Conserv of Wildlife Populatns	
WILD 499	Thesis	
Total Hours		6-12

Minimum Required Grade: C-

Mathematics Requirement

Rule: must take the following course

M 162	Applied Calculus	4
Total Hours		4

Minimum Required Grade: C-

Exception to the Modern/Classical Languages Requirement

Rule: The Wildlife Biology major has been granted an exception to the Modern/Classical Language Requirement. Must take one of the following courses to will satisfy this requirement.

Must take one of the following:		3-4
M 162	Applied Calculus	
STAT 216	Introduction to Statistics	
WILD 240	Intro to Biostatistics	
Total Hours		3-4

Minimum Required Grade: C-

Expressive Arts

Rule: Must take the following course

COMX 111A	Intro to Public Speaking	3
Total Hours		3

Minimum Required Grade: C-

Natural Sciences Requirement

Rule: Must take all courses

BIOB 160N	Principles of Living Systems	3
BIOB 161N	Prncpls of Living Systems Lab	1
CHMY 121N	Introduction to General Chemistry	3
CHMY 123	Introduction to Organic and Biochemistry	3
CHMY 124	Introduction to Organic and Biochemistry Lab	2
Total Hours		12

Minimum Required Grade: C-

Terrestrial Wildlife Biology

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: 74

Required Cumulative GPA: 2.5

Catalog Year: 2017-2018

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 (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

Major Required Courses	17
Outside Major Required Courses	21-22
Major Required Courses	35
Writing Requirement	12-18
Mathematics Requirement	4
Exception to the Modern/Classical Languages Requirement	8
Expressive Arts	3
Natural Sciences Requirement	12
Total Hours	112-119

Major Required Courses

Rule: Must take all courses

Note: Can take WRIT 325 (Honors) OR WRIT 201 in place of NRSM 200

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
Select one of the following:		3
NRSM 200	Nat.Resource Professional Wrtg	
WRIT 325	Science Writing (honors)	
WRIT 201	College Writing II	
WILD 180	Careers in Wildlife Biology	2
Total Hours		17

Minimum Required Grade: C-

Outside Major Required Courses

Rule: Must take all courses

CHMY 121N	Introduction to General Chemistry	3
CHMY 123	Introduction to Organic and Biochemistry	3
CHMY 124	Introduction to Organic and Biochemistry Lab	2
COMX 111A	Intro to Public Speaking	3
M 162	Applied Calculus	4
STAT 216	Introduction to Statistics	3-4
or WILD 240	Intro to Biostatistics	
WRIT 101	College Writing I	3
Total Hours		21-22

Minimum Required Grade: C-

Major Required Courses

Rule: Must take all courses

BIOE 370	General Ecology	3
BIOE 371	Gen Ecology Lab (equiv to 271)	2
BIOO 335	Rocky Mountain Flora	3
Select two of the following:		8
BIOO 340	Biology and Mgmt of Fishes	
BIOO 470	Ornithology	
BIOO 475	Mammalogy	
NRSM 360	Rangeland Mgt (equiv 260)	3
or FORS 347	Multiple Resource Silviculture	
WILD 346	Wildlife Physiological Ecology	3
WILD 370	Wildlife Habitat Cons & Mgmt	4
WILD 410	Wildlife Policy & Biopolitics	3
or NRSM 422	Nat Res Policy/Administration	
WILD 470	Conserv of Wildlife Populatns	4
WILD 480	The Upshot--Appld Wildlife Mgt	3
WILD 494	Senior Wildlife Seminar	1
Total Hours		37

Minimum Required Grade: C-

Writing Requirement

Rule: Must complete the following subcategories

12-18 Total Credits Required

Lower Division Writing

Rule: Complete all of the following courses

WRIT 101	College Writing I	3
Select one of the following:		3
NRSM 200	Nat.Resource Professional Wrtg	
WRIT 325	Science Writing	
WRIT 201	College Writing II	
Total Hours		6

Minimum Required Grade: C-

Upper Division Writing

Rule: Complete BIOE 371 and TWO of the other courses

BIOE 371	Gen Ecology Lab (equiv to 271)	2
Select two of the following:		4-10
BIOE 428	Freshwater Ecology	
BIOO 320	General Botany	
BIOO 470	Ornithology	
BIOO 475	Mammalogy	
WILD 408	Advanced Fisheries	
WILD 470	Conserv of Wildlife Populatns	
WILD 499	Thesis	
Total Hours		6-12

Minimum Required Grade: C-

Mathematics Requirement

Rule: must take the following course

M 162	Applied Calculus	4
Total Hours		4

Minimum Required Grade: C-

Exception to the Modern/Classical Languages Requirement

Rule: The Wildlife Biology major has been granted an exception to the Modern/Classical Language Requirement. Must take one of the following courses to will satisfy this requirement.

Select one of the following:		3-4
M 162	Applied Calculus	
STAT 216	Introduction to Statistics	
WILD 240	Intro to Biostatistics	
Total Hours		3-4

Minimum Required Grade: C-

Expressive Arts

Rule: must take the following course

COMX 111A	Intro to Public Speaking	3
Total Hours		3

Minimum Required Grade: C-

Natural Sciences Requirement

Rule: Must take all courses

BIOB 160N	Principles of Living Systems	3
BIOB 161N	Prncpls of Living Systems Lab	1
CHMY 121N	Introduction to General Chemistry	3
CHMY 123	Introduction to Organic and Biochemistry	3
CHMY 124	Introduction to Organic and Biochemistry Lab	2
Total Hours		12

Minimum Required Grade: C-

Wildlife Biology Minor

Chad Bishop, Director

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Minor - Wildlife Biology

W.A Franke College of Forestry & Conservation

Degree Specific Credits: 21

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Summary

Required Courses	15
Required Courses	6
Total Hours	21

Required Courses

Rule: must take the following courses

BIOB 170N	Princpls Biological Diversity	3
BIOB 171N	Princpls Biological Dvrsty Lab	2
BIOO 101N	Survey MT Wildlife & Habitats	3
WILD 105N	Wildlife & People	3
WILD 180	Careers in Wildlife Biology	2
WILD 275	Wildlife Conservation	2
Total Hours		15

Minimum Required Grade: C-

Required Courses

Rule: must take the following courses

BIOO 335	Rocky Mountain Flora	3
FORS 330	Forest Ecology	3
or NRSM 360	Rangeland Mgt (equiv 260)	
Total Hours		6

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 (<http://www.umt.edu/grad/Programs/default.php>) and on the Degree and Majors webpage (<http://www.umt.edu/academics/degrees-and-majors>). The Skaggs School of Pharmacy (<http://health.umt.edu/pharmacy>), the School of Physical Therapy and Rehabilitation Science (<http://health.umt.edu/physicaltherapy>), and the School of Law (<http://www.umt.edu/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 (<http://www.umt.edu/grad>) for degree programs offered. For further questions, please call us at 406-243-2572 or via email at grad.school@umontana.edu.

College of Health Professions and Biomedical Sciences

Reed Humphrey, Dean

Howard D. Beall, Associate Dean for Pharmacy

The College of Health Professions and Biomedical Sciences offers the

- Bachelor of Arts in Social Work degree,
- Bachelor of Science in Pharmaceutical Sciences
- Doctor of Pharmacy (Pharm.D.) degree;
- Master of Science degrees in
 - Neuroscience,
 - Pharmaceutical Sciences and Drug Design
 - Toxicology, and
 - Medicinal Chemistry;
- Master of Public Health degree;
- Master of Social Work degree;
- Doctor of Physical Therapy degree; and
- Doctor of Philosophy (Ph.D.) degrees in
 - Pharmaceutical Sciences and Drug Design
 - Neuroscience,
 - Toxicology,
 - Medicinal Chemistry, and
 - Public Health

The focus of these programs is to provide a composite of educational experiences that will produce a well-educated person and a highly trained, professional social worker, health care practitioner or scientist.

Health Sciences

Health science courses are concerned with fundamental issues in human health and disease and are, therefore, interdisciplinary in both scope and content. They have been designed not only for students anticipating careers in medicine, dentistry, nursing, public health, pharmacy, social work, medical technology, physical therapy, cytotechnology, and numerous other health care professions and services, but for all students interested in individual and community health, the clinical and paramedical arts, and the biomedical sciences. Health sciences courses are listed under two designations:

1. Allied Health: Health Sciences;
2. other disciplines.

Health Sciences Courses

Allied Health: Health Sciences

AHHS 191	Special Topics	1-6
AHHS 201	Living Well, Health & Disablil	2
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

Anthropology

ANTY 211N	Anthropological Genetics	3
ANTY 333	Culture and Population	3
ANTY 426	Culture, Health and Healing	3

Economics

ECNS 310	Intro Health Economics	3
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Health and Human Performance

NUTR 221N	Basic Human Nutrition	3
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Microbiology

BIOM 250N	Microbiology for Hlth Sciences	3
BIOM 251	Microbiology Hlth Sciences Lab	1
BIOM 400	Medical Microbiology	3

Social Work

S W 423	Addiction Studies	3
S W 455	Social Gerontology	3

Pharmacy

PHAR 110N	Use & Abuse of Drugs	3
PHAR 320	Am Ind Health Issues	3

Philosophy

PHL 321E	Philosophy & Biomedical Ethics	3
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Pre-Medical Sciences

Mark A. Pershouse (Director and Associate Professor)

Health care continues to be one of the most rapidly expanding areas of our society. Careers in the health professions have expanded, both in numbers and in the variety of opportunities. The rewards of a career in health care include excellent salaries, stability of employment, geographic mobility, and the opportunity to help other people. The Pre-Medical Sciences Program is an advising program that helps students become well-informed, well-prepared applicants to programs in allopathic medicine, osteopathic medicine, chiropractic medicine, dentistry, naturopathic medicine, optometry, physician assistant studies, podiatry and veterinary medicine.

Pre-Medical Sciences is not a major at the University of Montana. The Pre-Medical coursework will help students to gain admission to a professional school or program while completing a degree in a field of study. Students may select any major as a field of study, but specific pre-professional courses must be completed. When selecting a major, remember that a science major is not required for admissions into professional schools. It is more important to perform well in your chosen major. Professional schools are most concerned with the overall quality, scope and difficulty of undergraduate work rather than the major.

Pre-professional courses are designed to provide a strong foundation in the sciences, highly developed communication skills, and a solid background in the social sciences and humanities. Curriculum guides outlining minimal course requirements established by professional schools are available from the Pre-medical Sciences office and from the Pre-Medical Sciences website (<http://umt.edu/premed>). Because many majors within the sciences, social sciences and humanities can provide strong preparation for medical school, the Pre-Medical Sciences Advising Program gives students the opportunity to interact with advisors from diverse disciplines in addition to their advisor for their major.

The minimal requirements for professional school should be completed by the end of the third year of study or prior to taking the admission test required by professional schools. Since specific subject requirements vary among institutions, students should discuss their academic plans with their Pre-Medical Sciences advisor.

Admission to a professional school is very competitive. Students must maintain a high grade-point average in college if they expect to be admitted. All required courses must be taken for letter grades. In addition, the applicant must score well on the appropriate professional admissions test. These tests are designed to measure basic academic ability in the natural sciences, reading ability and problem solving skills. These examinations are usually taken during the third year of study.

Besides academic accomplishments and admission exam scores, acceptance by a professional school is also dependent upon letters of recommendation, volunteer experience, job shadowing, and personal interviews conducted by the professional school. It is important that students consult with a Pre-Medical Sciences advisor and with an academic advisor in their major each year to make sure that they can satisfy the necessary requirements for graduation within the time available. The Pre-Medical Sciences Director will also discuss procedures, advise and assist the student during the process of applying to a professional school.

High School Preparation

High school students contemplating a career in the health professions should have three to four years of mathematics, courses in chemistry and physics and a solid background in literature and social science.

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, 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 (<http://health.umt.edu/physicaltherapy>).

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 (<http://health.umt.edu/physicaltherapy>). 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

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 three program opportunities: a 42-credit online Master of Public Health (MPH), a 12-credit online Certificate of Public Health (CPH), and a 90-credit campus-based PhD in Public Health (PhD).

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.

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, implement educational programs, develop policies, administer services, conduct research, and regulate 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, Associate Professor, Chair, Ph.D.

Annie Belcourt, Associate Professor, Ph.D.

Kari Jo Harris, Professor, Ph.D., MPH

Erin Semmens, Assistant Professor, Ph.D., MPH

Curtis Noonan, Professor, Ph.D., MA

Erin Landguth, Research Associate Professor, Ph.D., MS

Website

www.health.umt.edu/publichealth (<http://www.health.umt.edu/publichealth>)

School of Social Work

Ryan Tolleson Knee, Chair

Social work is a human service profession concerned with the prevention of social problems, the maintenance of satisfying social relationships and the enhancement of human development. It focuses on people and their social environment. Social workers employ a range of knowledge and skills as the basis for constructive intervention on behalf of various client populations. The Bachelor of Arts and Master of Social Work degrees are offered. The Bachelor of Arts degree prepares graduates for generalist social work practice. The Master of Social Work degree prepares graduates for advanced integrated practice.

The undergraduate major in social work is available for those who wish to prepare for:

1. professional employment in the social services;
2. entry into a graduate school of social work;
3. graduate education in other helping service professions.

The graduate degree in social work prepares graduates for advanced social work practice. Students can enroll in a two year full-time program or in a part-time option. See the University of Montana Graduate Catalog for a description of the Master of Social Work program. Both the Bachelor of Arts degree and the Master of Social Work degree are fully accredited by the Council on Social Work Education.

Undergraduate

- Social Work B.S. (p. 139)

Undergraduate Minors

- Gerontology (p. 138)

Gerontology Minor

Students in the Gerontology Minor program will study issues of aging from an interdisciplinary perspective and come to understand the interplay between them, including the health and medical as well as social and psychological needs of older persons. Although this interdisciplinary minor is housed in the School of Social Work, students in other majors may complete the minor in consultation with both the Chair of the Gerontology Minor and the students' academic advisors in their respective departments. Students must consult with their major advisor to select electives, practicum or volunteer experiences, and to integrate courses that will meet the requirements of the minor.

Minor - Gerontology (Minor)

College of Health Prof Biomed

Degree Specific Credits: 21

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Summary

Lower Core Course	3
Upper Core Courses	9
Gerontology Electives	3
Integrating Courses	2-3
Practicum Courses	3
Total Hours	20-21

Lower Core Course

Rule: Must complete the following:

PSYX 233	Fund of Psychology of Aging	3
Total Hours		3

Minimum Required Grade: C-

Upper Core Courses

Rule: Must complete all of the following:

AHHS 325	Introduction to Gerontology	3
AHHS 430	Health Aspects of Aging	3
S W 455	Social Gerontology	3
Total Hours		9

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.

Select one from the following:	3	
AHHS 201	Living Well, Health & Disabilil	
AHHS 327	MGS Meeting	
AHHS 420	Geriatric Health Issues	
ANTY 426	Culture, Health and Healing	
COMX 485	Communication and Health	
ECNS 310	Intro Health Economics	
PHL 321E	Philosophy & Biomedical Ethics	
S W 475	Death, Dying and Grief	
SOCI 332	Sociology of the Family	
Total Hours		3

Minimum Required Grade: C-

Integrating Courses

Note: A course has been identified that will integrate the core course content with concepts within each student's major. A similar course can be identified in other majors if required. Students can also take NRSG 377 through Montana State University with approval by advisor.

Select one of the following: 2-3

KIN 483	Exercise Disease & Aging
P T 520	Development Through the Life Span
PHAR 451	Therapeutics I
S W 300	Hum Behav & Soc Environ
SOCI 332	Sociology of the Family

Total Hours 2-3

Minimum Required Grade: C-

Practicum Courses

Rule: Must complete 1 of the following courses

Note: Students can also take NRSRG 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.

Select 3 credits from the following: 3

AHHS 395	Geriatric Practicum
KIN 498	Internship
PHAR 585	Geriatric APPE
PSYX 398	Internship
S W 398	Internship
S W 495	Field Work Practicum
SOCI 498	Internship
WGSS 398	Coop Education/Internship

Total Hours 3

Minimum Required Grade: C-

Social Work B.A. Bachelor of Arts - Social Work

College of Health Prof Biomed

Degree Specific Credits: 65

Required Cumulative GPA: 2.75

Catalog Year: 2017-2018

Note: A minimum of 40 social work credits are required for this degree. No more than 60 social work credits will count toward graduation. Admission into the School of Social Work requires a 2.75 overall GPA, a 3.00 in Social Work courses and completion of 5 of 8 extra departmental courses.

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

Lower Division Core Courses	32
Social Science Requirements	

Economics Requirement

Human Population Requirement	
Biological Requirement	
Upper Core Courses	33
Total Hours	65

Lower Division Core Courses

Rule: Take 32 Credits in the following subcategories

32 Total Credits Required

Social Science Requirements

Rule: All of the following courses are required.

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	4
SOCI 101S	Introduction to Sociology	3
Total Hours		22

Minimum Required Grade: C-

Economics Requirement

Rule: Choose 1 of the following courses

ECNS 101S	Economic Way of Thinking	3
	or ECNS 201S Principles of Microeconomics	
Total Hours		3

Minimum Required Grade: C-

Human Population Requirement

Select one of the following: 3

ANTY 122S	Race and Minorities	
GPHY 121S	Human Geography	
SOCI 220S	Race, Gender & Class	
Total Hours		3

Minimum Required Grade: C-

Biological Requirement

Rule: Choose 1 of the following courses

BIOB 101N	Discover Biology	3
	or PSYX 250N Fund of Biological Psychology	
Total Hours		3

Minimum Required Grade: C-

Upper Core Courses

Rule: All courses listed are required

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	4
S W 400	Social Work Research	3
S W 410E	Social Work Ethics	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		33

Minimum Required Grade: C-

Skaggs School of Pharmacy

Patient care is at the center of pharmacy practice. As the medication experts on the health care team, our students will be prepared to promote the health and well-being of individuals and communities. Our curriculum supports interprofessional education and focuses on the development of professional leaders engaged in service.

The Skaggs School of Pharmacy was established in 1907 at Montana State College, was transferred to the University of Montana in 1913, and resides in the College of Health Professions and Biomedical Sciences. The Skaggs School of Pharmacy consists of two departments, Pharmacy Practice and Biomedical and Pharmaceutical Sciences, and is a member of the American Association of Colleges of Pharmacy. The entry-level doctor of pharmacy program is fully accredited by the Accreditation Council for Pharmacy Education, 135 S. LaSalle Street, Suite 4100, Chicago IL 60603-4810, telephone (312) 664-3575, (800) 533-3606; FAX (312) 664-4652; Accreditation Council for Pharmacy Education website (<http://www.acpe-accredit.org>) (<http://www.acpe-accredit.org/>)

The curriculum offered by the Skaggs School of Pharmacy consists of a six-year program leading to the entry-level Pharm.D. degree. The first two years, or pre-professional portion of the curriculum, are spent in studies of the basic biological and physical sciences, and in course work necessary to satisfy the University general education requirements. During the first three years of the professional program, students devote their time to the study of the biomedical and pharmaceutical sciences and pharmacy practice. Areas of study include biochemistry, microbiology, medicinal chemistry, pharmaceuticals, pharmacology, social and administrative pharmacy, and therapeutics. The final professional year is entirely experiential and designed to fully prepare students to enter the profession as pharmacist patient care providers.

A program of selected electives allows the student to obtain further educational experience in specialized areas. Students in the professional program may choose elective courses in community pharmacy practice, management, research and teaching, hospital and institutional pharmacy practice, and a variety of therapeutic-based topics.

In addition to their formal educational program, to become registered pharmacists, students must complete practical experience under the direction of registered pharmacists and pass the NAPLEX and MPJE exams administered by the National Association of Boards of Pharmacy.

Career opportunities exist in the fields of community pharmacy, 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 and in pharmaceutical education.

High School Preparation: In addition to the general University admission requirements, algebra, trigonometry, biology, chemistry, physics and a course in computers are recommended.

Pre-pharmacy Program: The pre-pharmacy curriculum, which requires a minimum of two years of full-time study, may be taken at any accredited college or university. Students at the University of Montana-Missoula may enter the pre-pharmacy program during any semester. It is recommended that students considering pharmacy as a major declare a pre-pharmacy major as early as possible in order to receive appropriate advising. Upon designating pre-pharmacy as a major, students will be assigned an advisor within the pharmacy program.

Professional Pharmacy Program: Students must apply for admission to the professional program. Class size in the professional pharmacy program is restricted and admission to the program is competitive. For information on program requirements and the application procedure, refer to Prospective Students on the pharmacy program website (<http://health.umt.edu/pharmacy>)(<http://health.umt.edu/pharmacy/>)

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. Degree programs include the M.S. in

- Neuroscience,
- Pharmaceutical Sciences and Drug Design
- Toxicology and
- Medical Chemistry;

and the Ph.D. in

- Neuroscience,
- Pharmaceutical Sciences and Drug Design,
- Toxicology, and
- Medical Chemistry.

These programs provide education and training in pharmacology, toxicology, neurobiology, neurochemistry, medicinal chemistry, and molecular genetics. Program graduates are well prepared for careers in academia, government and industry.

B.S. Pharmaceutical Sciences

The Bachelor of Science in Pharmaceutical Sciences may be earned after a successful completion of a minimum of two years of required pre-pharmacy coursework and the first two basic science intensive years of the Pharm. D. curriculum. The B.S. Pharmaceutical Science degree is intended for students that enter the professional pharmacy program

without a prior four-year degree and/or who intend to pursue graduate studies.

Pre-Pharmacy Curriculum

The courses shown here must be completed before entering the professional pharmacy program. The sequence of courses is illustrative and, if proper prerequisites are satisfied, the student may alter the order in which the courses are taken.

In addition, applicants to the professional pharmacy program must present proof of having completed at least 20 hours of volunteer or paid service in a pharmacy, other health care, or social field, a writing assignment about the experience, and one evaluation form from someone involved with the applicant in such an experience. The Pharmacy College Admission Test (PCAT) must be taken within two years of application.

Pre-Pharmacy First Year

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
M 162	Applied Calculus (prereq. M 151 or appropriate placement score)	4
BIOH 112	Human Form and Function I	3
BIOH 113	Human Form and Function II	3
WRIT 101	College Writing I	3

Pre-Pharmacy Second Year

BIOB 260	Cellular and Molecular Biology	4
CHMY 221 & CHMY 222	Organic Chemistry I and Organic Chemistry I Lab	5
ECNS 201S	Principles of Microeconomics	3
PHSX 205N & PHSX 206N	College Physics I and College Physics I Laboratory	5

Select one of the following: 3-4

STAT 216	Introduction to Statistics	
PSYX 222	Psychological Statistics	
SOCI 202	Social Statistics	

Either Year, any semester- Required

PSYX 100S	Intro to Psychology	3
THTR 120A	Introduction to Acting I	3
or COMX 111A	Intro to Public Speaking	

Either year, any semester - Recommended courses to fulfill UM General Education requirements¹

ANTY 101H	Anthro & the Human Experience	3
or NASX 105H	Intro Native Amer Studies	
LIT 110L	Intro to Lit	3
or LIT 120L	Poetry	
Select one of the following:		3
ANTY 122S	Race and Minorities	
HSTR 101H	Western Civilization I	
HSTA 101H	American History I	

Total Hours 58-59

¹ Students must complete the University's General Education requirements. Due to the limitation of elective credits in the professional pharmacy curriculum, students are advised to complete the lower-division General Education requirement during the pre-pharmacy curriculum.

Professional Pharmacy Curriculum

Students must apply for admission to the professional program (<http://health.umt.edu/pharmacy>). 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 (p. 43) section of this catalog for details. Students must demonstrate proficiency in pharmaceutical calculation by successfully completing a competency assessment prior to entering the second professional year.

The Upper-Division Writing Requirement must be met by successfully completing PHAR 550 or an upper-division writing course from the approved list in the Academic Policies and Procedures (p. 7) section of this catalog. See index.

First Year		Hours
Autumn		
PHAR 381	Pharmaceutical Biochemistry	4
PHAR 341	Physiological Systems I	4
PHAR 361	Pharm Sci Lab I	1
BIOM 400	Medical Microbiology	3
PHAR 300	Pharmacy Practice I	3
PHAR 371	Integrated Studies I	1
		Hours 16
Spring		
PHAR 328	Antimicrobial Agents	3
PHAR 331	Pharmaceutics	4
PHAR 342	Physiological Systems II	4
PHAR 362	Pharm Sci Lab II	1
PHAR 310	Pharmacy Practice II	2
PHAR 363	Pharmaceutical Care Lab I	1
PHAR 372	Integrated Studies II	1
		Hours 16
Second Year		
Autumn		
PHAR 421	Medicinal Chem I	3
PHAR 432	Clinical Pharmacokinetics	3
PHAR 443	Pharmacol & Toxicol I	4
PHAR 451	Therapeutics I	3
PHAR 460	Pharmaceut Care Lab II	1
PHAR 471	Integrated Studies III	1

Electives		1
	Hours	16
Spring		
PHAR 412	Pharmacy Practice III	2
PHAR 422	Medicinal Chem II	3
PHAR 444	Pharmacology & Toxicology II	4
PHAR 452	Therapeutics II	3
PHAR 463	Pharmaceutical Care Lab III	1
PHAR 472	Integrated Studies IV	1
Electives		2
	Hours	16
	Total Hours	64

Required credits: 120

Doctor of Pharmacy Special Degree Requirements

Refer to graduation requirements (p. 28) 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:
 - a. all courses attempted at The University of Montana-Missoula (cumulative GPA).
 - b. all courses which carry a pharmacy (PHAR) prefix (pharmacy GPA).
 - c. all required courses in the professional pharmacy curriculum (professional GPA).
3. Required pharmacy course work must be completed with a grade of C- or better.
4. Complete at least six full academic years, including pre-pharmacy instruction, and a minimum of eight semesters of professional instruction as a full-time student registered for a minimum of twelve credits per semester.
5. Complete not less than 200 credits of course work.

Licensure in Montana

An applicant for licensure as a registered pharmacist in Montana must pass national examinations as required by the Montana State Board of Pharmacy. To qualify for the examinations, the applicant must be of good moral character and a graduate of an accredited school of pharmacy; however, an applicant will not receive a license until all requirements have been met.

Pre-Pharmacy Curriculum

The courses shown here must be completed before entering the professional pharmacy program. The sequence of courses is illustrative and, if proper prerequisites are satisfied, the student may alter the order in which the courses are taken.

In addition, applicants to the professional pharmacy program must present proof of having completed at least 20 hours of volunteer or

paid service in a pharmacy, other health care, or social field, a writing assignment about the experience, and one evaluation form from someone involved with the applicant in such an experience. The Pharmacy College Admission Test (PCAT) must be taken within two years of application.

Pre-Pharmacy First Year

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
M 162	Applied Calculus (prereq. M 151 or appropriate placement score)	4
BIOH 112	Human Form and Function I	3
BIOH 113	Human Form and Function II	3
WRIT 101	College Writing I	3

Pre-Pharmacy Second Year

BIOB 260	Cellular and Molecular Biology	4
CHMY 221 & CHMY 222	Organic Chemistry I and Organic Chemistry I Lab	5
ECNS 201S	Principles of Microeconomics	3
PHSX 205N & PHSX 206N	College Physics I and College Physics I Laboratory	5
Select one of the following:		3-4
STAT 216	Introduction to Statistics	
PSYX 222	Psychological Statistics	
SOCI 202	Social Statistics	

Either Year, any semester- Required

PSYX 100S	Intro to Psychology	3
THTR 120A	Introduction to Acting I	3
	or COMX 111A Intro to Public Speaking	
Total Hours		49-50

Professional Pharmacy Curriculum

Students must apply for admission to the professional program (<http://health.umt.edu/pharmacy>). 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 (p. 43) section of this catalog for details. Students must demonstrate proficiency in pharmaceutical calculation by successfully completing a competency assessment prior to entering the second professional year.

The Upper-Division Writing Requirement must be met by successfully completing PHAR 550 or an upper-division writing course from the approved list in the Academic Policies and Procedures (p. 7) section of this catalog. See index.

First Year	Autumn	Hours
PHAR 381	Pharmaceutical Biochemistry	4
PHAR 341 or PHAR 342	Physiological Systems I or Physiological Systems II	4

PHAR 361 or PHAR 362	Pharm Sci Lab I or Pharm Sci Lab II	1
BIOM 400	Medical Microbiology	3
PHAR 300	Pharmacy Practice I	3
PHAR 371 or PHAR 372	Integrated Studies I or Integrate Studies II	1
Hours		16

Spring

PHAR 328	Antimicrobie Agents	3
PHAR 331	Pharmaceutics	4
PHAR 341 or PHAR 342	Physiologicæ Systems I or Physiolo Systems II	4
PHAR 361 or PHAR 362	Pharm Sci Lab I or Pharm Sci Lab II	1
PHAR 310	Pharmacy Practice II	2
PHAR 363	Pharmaceutical Care Lab I	1
PHAR 371 or PHAR 372	Integrated Studies I or Integrate Studies II	1
Hours		16

Second Year

Autumn

PHAR 421 or PHAR 422	Medicinal Chem I or Medicine Chem II	3
PHAR 432	Clinical Pharmacokinetics	3
PHAR 443 or PHAR 444	Pharmacol Toxicol I or Pharmac Toxicol II	4
PHAR 451 or PHAR 452	Therapeutics I or Therapeutics II	3
PHAR 460 or PHAR 463	Pharmaceut Care Lab II or Pharmac Care Lab III	1

PHAR 471 or PHAR 472	Integrated Studies III or Integrated Studies IV	1
Electives		1
Hours		16

Spring

PHAR 480	Community Pharmacy IPPE	3
PHAR 421 or PHAR 422	Medicinal Chem I or Medicinal Chem II	3
PHAR 443 or PHAR 444	Pharmacol Toxicol I or Pharmac Toxicol II	4
PHAR 412	Pharmacy Practice III	2
PHAR 451 or PHAR 452	Therapeutic I or Therapet II	3
PHAR 460 or PHAR 463	Pharmaceutical Care Lab II or Pharmaceutical Care Lab III	1
PHAR 471 or PHAR 472	Integrated Studies III or Integrate Studies IV	1
Electives		2
Hours		19

Third Year

Autumn

PHAR 505	Pharmacy Practice IV	3
PHAR 550	Drug Literature Eval	3
PHAR 553 or PHAR 554	Therapeutics III or Therapeutics IV	4
PHAR 557	Public Health In Pharmacy	2
PHAR 560 or PHAR 563	Pharmaceutical Care Lab IV or Pharmaceutical Care Lab V	1

PHAR 571 or PHAR 572	Integrated Studies V or Integrate Studies VI	1
		Hours 14
Spring		
PHAR 481	Hospital Pharmacy IPPE	3
PHAR 506	Pharmacy Practice V	3
PHAR 513	Pharmacoeoc	3
PHAR 514E	Case Studies Pharm Ethics	3
PHAR 553 or PHAR 554	Therapeutic III or Therapet IV	4
PHAR 560 or PHAR 563	Pharmaceutical Care Lab IV or Pharmaceutical Care Lab V	1
PHAR 571 or PHAR 572	Integrated Studies V or Integrate Studies VI	1
PHAR 578	Port Assess/ APPE Orient	1
		Hours 19
Fourth Year		
Autumn		
PHAR 579	Comm Pharm APPE	4
PHAR 581	Inpatient APPE	4
PHAR Elective Pharmacy Practice Experience		8
		Hours 16
Spring		
PHAR 580	Hosp Pharm APPE	4
PHAR 582	AMB Care APPE	8
PHAR Elective Pharmacy Practice Experience		8
		Hours 20
		Total Hours 136

Required credits: 200

College of Humanities and Sciences

Christopher M. Comer, Dean

Jenny McNulty, Associate Dean

S. Melanie Hoell, Director of Advising

Homepage (<http://hs.umt.edu/hs>)

The College of Humanities and Science is the intellectual core of the University of Montana. We fulfill the central purpose for which the University was chartered in 1893: to provide a liberal education and integrated knowledge of the humanities and the sciences.

A liberal arts education gives students the means to think broadly and test the value of diverse ideas, beliefs and facts. It empowers them to continue the learning process throughout life. By studying the ways of thinking and expression that are characteristic of the humanities and the social and natural sciences, students will be educated citizens. They will be enabled to think critically about scientific methods and findings, social analysis, creativity in the arts and humanities, aesthetics and values. Equally important is effective expression of one's understandings. Clear thinking, cogent expression, and solid values provide the foundation of successful careers.

A particular strength of the College is the breadth of its disciplines and programs. This breadth makes possible a varied and flexible curriculum that advances both general programs and specialized education on the undergraduate and graduate levels. Another strength is the quality of the faculty. Its members have a distinguished record of teaching, research and creation of new knowledge, and service to our communities. Their commitment to undergraduate liberal arts education is demonstrated by the quality of the graduates the College has produced. The pre-professional education received here has enabled University of Montana graduates to compete successfully for admission to graduate schools across the nation. A third strength of the College is its commitment to students as they pursue their academic studies at the University. This is reflected in close student/faculty relationships and in the continuous attention given by the College to the effect that policies, procedures, and administrative practices have on students' educational experience.

African-American Studies

Tobin Miller Shearer, Program Director

African-American Studies at the University of Montana connects African and African-American (including Latin America and the Caribbean) history, experiences, and perspectives with the 21st century. The goal of the African-American Studies curriculum is to develop basic knowledge of, and appreciation for, the diverse experiences of the African Diaspora, and their contributions to the nations into which they were incorporated. Through this study students will recognize that the African-American narrative connects to the core issues of nation formation, identity politics, social movements, and the liberal state. Those who take this minor will likewise be equipped to talk alongside, through, and in the midst of the racial fracture lines that mark this nation as a country where the color of one's skin is socially significant. In all these efforts, we promote scholarship that is driven first and foremost by an interest in creating knowledge and furthering our understanding of the African-American experience. The interdisciplinary curriculum of African-American Studies includes course offerings from the following academic disciplines: anthropology, economics, English, geography, history, music, political science, and sociology. Some topics of study include:

- African heritage and cultural continuity among African-Americans;
- African-American identity issues and cultural variation;
- the history of African-American protest and resistance, including the abolitionist, anti-lynching, and civil rights movements;
- the Harlem Renaissance;

- the social dynamics of integration and segregation; and
- the various circumstances of, and prospects for, African Americans in the 21st century.

Undergraduate

- African-American Studies B.A. (p. 145)

Undergraduate Minors

- African-American Studies Minor (p. 145)

African-American Studies B.A.

Bachelor of Arts - African-American Studies

College Humanities & Sciences

Degree Specific Credits: 36

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

Core Courses	18
Elective Courses	15
Capstone	3
Total Hours	36

Core Courses

Rule: Students must complete the following courses

AAST 141H	Black: From Africa to Hip-Hop	3
ANTY 122S	Race and Minorities	3
HSTA 343H	Afr Amer Hist Since 1865	3
SOCI 220S	Race, Gender & Class	3
SOCI 325	Social Stratification	3
HSTA 342H	Afr Amer Hist to 1865	3
Total Hours		18

Minimum Required Grade: C-

Elective Courses

Rule: 15 Credits required, 6 of which must be at the upper division

Note: Capstone: Each student must also perform a 3-credit capstone project as an independent study in which they conduct a research project, service project, or artistic project focused on an issue pertinent to the African-American community. All projects must be approved by the AAS director.

Select 15 credits including 6 upper division credits from the following: 15

AASC 291	Special Topics
AAST 208H	Discovering Africa
AAST 260	African Americans and Native Americans
AAST 262	Abolitionism: The First Civil Rights Movement
ANTY 330X	Peoples and Cultures of World
ANTY 349	Social Change in NnWstrn Socts
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 262	Abolitionism
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
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 15

Minimum Required Grade: C-

African-American Studies Minor

Minor - African-American Studies (Minor)

College Humanities & Sciences

Degree Specific Credits: 24

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018**Summary**

African-American Studies Core Courses	9
African-American Studies Electives	6
Other Electives	9
Total Hours	24

African-American Studies Core Courses

Rule: All courses are require

AAST 141H	Black: From Africa to Hip-Hop	3
HSTA 342H	Afr Amer Hist to 1865	3
HSTA 343H	Afr Amer Hist Since 1865	3
Total Hours		9

Minimum Required Grade: C-

African-American Studies Electives

Rule: 6 credits required from the following electives, 3 of which must be in an upper division cours

Select 6 credits from the following:	6	
AAST 291	Special Topics	1-12
AAST 208H	Discovering Africa	3
AAST 260	African Americans and Native Americans	3
AAST 262	Abolitionism: The First Civil Rights Movement	3
AAST 372	African-American Identity	3
AAST 491	Special Topics	1-6
HSTA 347	Voodoo, Muslim, Church: Black Religion	3
HSTA 415	The Black Radical Tradition	3
HSTA 417	Prayer & Civil Rights	3
Total Hours		29-45

Minimum Required Grade: C-

Other Electives

Rule: 9 credits are required from the following courses. At least 2 of the courses must be from different disciplines.

Note: FRCH 391: must be African-American Literature.

Select 9 credits from the following:	9
ANTY 122S	Race and Minorities
ANTY 330X	Peoples and Cultures of World
ANTY 349	Social Change in NnWstrn Socts
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	9

Minimum Required Grade: C-

Anthropology

Tully J. Thibeau, 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 options 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. (p. 147)
- Anthropology B.A., Archaeology Concentration (p. 149)
- Anthropology B.A., Cultural and Ethnic Diversity Concentration (p. 151)
- Anthropology B.A., Forensic Anthropology Concentration (p. 154)
- Anthropology B.A., Linguistics Concentration (p. 157)
- Anthropology B.A., Medical Anthropology Concentration (p. 160)

Undergraduate Minors

- Anthropology Minor (p. 148)
- Linguistics Minor (p. 159)

Undergraduate Certificates

- English as a Second Language Certificate of Art (p. 153)
- Forensic Studies Certificate of Art (p. 156)
- Historic Preservation Certificate of Applied Science (p. 157)

Anthropology B.A.

Anthropology is an interconnected discipline and majors are urged to acquire a broad background especially in the natural and social sciences and the humanities. Recommended areas of study are biology, economics, English, geography, geology, history, communication studies, linguistics, Native American studies, philosophy, political science, psychology, religious studies, and sociology.

Bachelor of Arts - Anthropology

College Humanities & Sciences

Degree Specific Credits: 36

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

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 quantitative methods. Students must complete the core courses and the quantitative course with a letter grade of C- or better.

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umd.edu/academics/general-education-requirements>) of the catalog.

Summary

Lower Division Core Courses	12
Anthropology or Cognate Electives	12
Upper Division Writing 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	
Total Hours	39

Lower Division Core Courses

Rule: Complete all 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-

Anthropology or Cognate Electives

Rule: Complete 12 credits.

Note: Speak to your academic adviser for a full list of approved Anthropology or Cognate electives.

Minimum Required Grade: C-

12 Total Credits Required

Upper Division Writing Requirement

Rule: Complete either an upper-division writing course from approved list in catalog, or one of the following courses listed below.

Select one of the following:	3
ANTY 402	Quan Ethnographic Field Methds
ANTY 408	Advanced Anthro Statistics
ANTY 450	Archaeological Theory
ANTY 455	Artifact Analysis
LING 473	Language and Culture
LING 484	NA Indigenous Lang & Ling

Total Hours 3

Minimum Required Grade: C-

Subarea I-Theory and Methods

Rule: Complete 3 credits in Theory and 3 credits in Methods

Minimum Required Grade: C-

6 Total Credits Required

Anthropological Theory

Rule: Complete one of the following

Select one of the following:	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

Rule: Complete one of the following

Select 3 credits from the following:	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 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

Minimum Required Grade: C-

6 Total Credits Required

Subarea II: Human Adaptation and Diversity

Rule: Complete one of the following

Select one of the following:	3
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

Rule: Complete one of the following

Select one of the following:	3
ANTY 141H	The Silk Road
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

Rule: Complete one of the following

Select one of the following:	3
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 in NnWstrn Socts
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 Minor

Minor - Anthropology (Minor)

College Humanities & Sciences

Degree Specific Credits: 18

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Summary

Lower Core Courses	12
Subarea 1 Elective	3
Subareas 2,3 and 4 Electives	3
Total Hours	18

Lower Core Courses

Rule: Must complete all of the following:

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-

Subarea 1 Elective

Rule: Must complete 1 of the following:

Note: If ANTY 466 or ANTY 495 are taken, they must be taken for 3 credits

Select 3 credits from the following: 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
ANTY 467	Archaeological Field School
ANTY 476	Methods for Native Languages
ANTY 495	Field Experience:
LING 472	Generative Syntax
LING 475	Linguistic Field Methods

Total Hours 3

Minimum Required Grade: C-

Subareas 2,3 and 4 Electives

Rule: Must complete 1 of the following:

Select one of the following: 3

ANTY 216	Primates in Peril
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 in NnWstrn Socts
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	Arch of the Arctic/Subarctic
ANTY 465	Arch of the SW United States
HSTA 415	The Black Radical Tradition
LING 375X	Linguistic Ecology and Language Endangerment
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-

Archaeology

Bachelor of Arts - Anthropology; Archaeology Concentration

College Humanities & Sciences

Degree Specific Credits: 36

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Note: For a degree in Anthropology with a concentration in Archeology, student must complete all the general major requirements, including a total of nine credits of Archeology Concentration core requirements. Note that in addition to fulfilling concentration requirements these ANTY courses also fulfill certain major requirements.

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umd.edu/academics/general-education-requirements>) of the catalog.

Summary

Lower Division Core Courses	12
Anthropology or Cognate Electives	12
Upper Division Writing Requirement	3
Subarea I-Theory and Methods	6
Subarea II, III, IV	6
Subarea II: Human Adaptation and Diversity	
Subarea III: World Societies and Cultures	
Subarea IV: Concepts and Issues	
Archeology Core Courses	9
Area	
Theory	
Methods	
Total Hours	48

Lower Division Core Courses

Rule: Complete all 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

Anthropology or Cognate Electives

Rule: Complete 12 credits.

Note: The student must complete six credits from **one** of the following allied disciplines (Biology, Geography, Geology) and six credits from **one** of the following allied disciplines (Computer Science, Environmental Studies, Forestry, History, Mathematical Sciences, or Native American Studies).

Minimum Required Grade: C

12 Total Credits Required

Upper Division Writing Requirement

Rule: Complete either an upper-division writing course from approved list in catalog, or one of the following courses listed below.

Select one of the following:		3
ANTY 402	Quan Ethnographic Field Methds	
ANTY 408	Advanced Anthro Statistics	
ANTY 450	Archaeological Theory	
ANTY 455	Artifact Analysis	
LING 473	Language and Culture	

LING 484	NA Indigenous Lang & Ling	
Total Hours		3

Minimum Required Grade: C-

Subarea I-Theory and Methods

Rule: Complete 3 credits in Theory and 3 credits in Methods

Minimum Required Grade: C

6 Total Credits Required

Anthropological Theory

Select one of the following:		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

Select 3 credits from the following:		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 431	Ethnographic Field Methods	
ANTY 451	Cultural Resource Management	
ANTY 454	Lithic Technology	
ANTY 455	Artifact Analysis	
ANTY 466	Archaeological Survey	
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

Minimum Required Grade: C

6 Total Credits Required

Subarea II: Human Adaptation and Diversity

Select one of the following: 3

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

Select one of the following: 3

ANTY 141H	The Silk Road
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	Arch of the Arctic/Subarctic
ANTY 465	Arch of the SW United States

Total Hours 3

Minimum Required Grade: C

Subarea IV: Concepts and Issues

Select one of the following: 3

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 in NnWstrn Socts
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
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Total Hours 3

Minimum Required Grade: C

Archeology Core Courses**Rule:** Complete one course from each of the 3 Archeology Core Courses Subcategories (Area, Theory, Methods)

Minimum Required Grade: C

9 Total Credits Required

Area

Select one of the following: 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	Arch of the Arctic/Subarctic
ANTY 465	Arch of the SW United States

Total Hours 3

Minimum Required Grade: C

Theory

Select one of the following: 3

ANTY 450	Archaeological Theory
ANTY 456	Historical Archaeology
ANTY 458	Arch of Hunter-Gatherers

Total Hours 3

Minimum Required Grade: C

Methods

Select 3 credits from the following: 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

Cultural and Ethnic Diversity**Bachelor of Arts - Anthropology; Cultural and Ethnic Diversity Concentration****College Humanities & Sciences**

Degree Specific Credits: 36

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

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 option (ANTY 122S, ANTY 310, ANTY 423, and ANTY 330X). Note that in addition to fulfilling concentration requirements these ANTY courses also fulfill certain major requirements.

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umd.edu/academics/general-education-requirements>) of the catalog.

Summary

Lower Division Core Courses	12
Anthropology or Cognate Electives	12
Upper Division Writing 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	
Cultural and Ethnic Diversity Concentration Requirements	12
Total Hours	51

Lower Division Core Courses

Rule: Complete all 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

Anthropology or Cognate Electives

Rule: Complete 12 credits.

Note: The student must complete six credits, with adviser approval, in **one** of the following disciplines (Anthropology, History, or Sociology), and six upper-division credits in **one** of the following allied disciplines (African-American Studies, Central and Southwest Asian Studies, East Asian Studies, Latin American Studies, Native American Studies, or Women's and Gender Studies).

Minimum Required Grade: C

12 Total Credits Required

Upper Division Writing Requirement

Rule: Complete either an upper-division writing course from approved list in catalog, or one of the following courses listed below.

Select one of the following:	3
ANTY 402	Quan Ethnographic Field Methds
ANTY 408	Advanced Anthro Statistics
ANTY 450	Archaeological Theory
ANTY 455	Artifact Analysis
LING 473	Language and Culture
LING 484	NA Indigenous Lang & Ling
Total Hours	3

Minimum Required Grade: C-

Subarea I-Theory and Methods

Rule: Complete 3 credits in Theory and 3 credits in Methods

Minimum Required Grade: C

6 Total Credits Required

Anthropological Theory

Select one of the following:	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

Total Hours 3

Minimum Required Grade: C

Anthropological Methods

Select 3 credits from the following:	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 431	Ethnographic Field Methods
ANTY 451	Cultural Resource Management
ANTY 454	Lithic Technology
ANTY 455	Artifact Analysis
ANTY 466	Archaeological Survey
ANTY 476	Methods for Native Languages
ANTY 495	Field Experience:
LING 474	Historical Linguistics
LING 475	Linguistic Field Methods
Total Hours	3

Total Hours 3

Minimum Required Grade: C

Subarea II, III, IV

Rule: Complete 6 credits from 2 of 3 Subareas

Minimum Required Grade: C

6 Total Credits Required

Subarea II: Human Adaptation and Diversity

Select one of the following: 3

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

Select one of the following: 3

ANTY 141H	The Silk Road
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	Arch of the Arctic/Subarctic
ANTY 465	Arch of the SW United States

Total Hours 3

Minimum Required Grade: C

Subarea IV: Concepts and Issues

Select one of the following: 3

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 in NnWstrn Socts
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

Cultural and Ethnic Diversity Option Requirements

Rule: Complete all 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

SIX Credits with Advisor approval in Anthropology, History or Sociology.

Six Upper Division Credits with Advisor approval in African-American Studies, Asian Studies, Native American Studies or Women's Studies.

English as a Second Language Certificate

Certificate of Art - Engl as a Sec Lang

College Humanities & Sciences

Degree Specific Credits: 22

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Note: The Certificate is issued by the University upon the recommendation of the Linguistics Program and the Faculty Senate

Summary

Core Courses	16
Required Courses	
Core Options	
Elective Courses	6
Total Hours	22

Core Courses

Rule: Must complete the following subcategories

16 Total Credits Required

Required Courses

Rule: All courses are required

Note: LING 495 may be taken for 1 credit on a credit/no credit basis.

LING 470	Linguistic Analysis	3
LING 471	Phonetics and Phonology	3
LING 472	Generative 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

Minimum Required Grade: C-

Core Options

Rule: Complete 1 of the following courses

LING 477	Bilingualism	3
or LING 478	Learner Language	
Total Hours		3

Minimum Required Grade: C-

Elective Courses

Rule: Complete 2 of the following courses

Note: LING 477 or LING 478 may be taken as an Elective if not taken as a Required

Select two of the following:	6	
LING 473	Language and Culture	
LING 489	Morphology	
Total Hours		6

Minimum Required Grade: C-

Forensic Anthropology Bachelor of Arts - Anthropology; Forensic Anthropology Concentration

College Humanities & Sciences

Degree Specific Credits: 36

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Note: For a degree in Anthropology with a concentration in Forensic Anthropology the student must meet all the general requirements for the major, including the completion of ANTY 310, ANTY 314, and an approved option elective field or laboratory course. Note that in addition to fulfilling concentration requirements these ANTY courses also fulfill certain major requirements.

General Education Requirements

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Anthropological Methods	
Subarea II, III, IV	6
Subarea II: Human Adaptation and Diversity	
Subarea III: World Societies and Cultures	
Subarea IV: Concepts and Issues	
Forensic Anthropology Concentration	15-16
Concentration Requirements	
Concentration Electives	
Total Hours	54-55

Lower Division Core Courses

Rule: Complete all 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-

Anthropology or Cognate Electives

Rule: Complete 12 credits.

Note: The student must complete CJUS 125N, either SOCI 211S OR SOCI 221 and 12 elective credits from approved courses in criminology or disciplines for which a branch of the forensic sciences exists. The student should work with their advisor to select these elective courses.

Minimum Required Grade: C-

12 Total Credits Required

Upper Division Writing Requirement

Rule: Complete either an upper-division writing course from the approved list in the catalog, or one of the following courses listed below.

Select one of the following:	3
ANTY 314	Principles of Forensic Anthro
ANTY 402	Quan Ethnographic Field Methds
ANTY 408	Advanced Anthro Statistics
ANTY 450	Archaeological Theory
ANTY 455	Artifact Analysis
LING 473	Language and Culture
LING 484	NA Indigenous Lang & Ling
Total Hours	3

Minimum Required Grade: C-

Subarea I-Theory and Methods

Rule: Complete 3 credits in Theory and 3 credits in Methods. Students in the Forensic Anthropology Option should satisfy this requirement with ANTY 312, ANTY 415, ANTY 450, or ANTY 456.

Minimum Required Grade: C-

6 Total Credits Required

Anthropological Theory

Select one of the following: 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

Rule: Complete one of the following. Forensic Anthropology Option students should fill this requirement with a course consistent with the Option Elective below.

Select 3 credits from the following: 3

ANTY 402	Quan Ethnographic Field Methods
ANTY 408	Advanced Anthro Statistics
ANTY 412	Osteology
ANTY 413	Forensic and Mortuary Arch
ANTY 416	Dental Anthropology
ANTY 431	Ethnographic Field Methods
ANTY 451	Cultural Resource Management
ANTY 454	Lithic Technology
ANTY 455	Artifact Analysis
ANTY 466	Archaeological Survey
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

Minimum Required Grade: C-

6 Total Credits Required

Subarea II: Human Adaptation and Diversity

Select one of the following: 3

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

Select one of the following: 3

ANTY 141H	The Silk Road
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	Arch of the Arctic/Subarctic
ANTY 465	Arch of the SW United States

Total Hours 3

Minimum Required Grade: C-

Subarea IV: Concepts and Issues

Select one of the following: 3

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 in NnWstrn Socts
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-

Forensic Anthropology Option

Rule: Must complete the following subcategories

15-16 Total Credits Required

Option Requirements

Rule: Complete the following courses

ANTY 310	Human Variation	3
ANTY 314	Principles of Forensic Anthro	3
CJUS 125N	Fund of Forensic Science	3
Total Hours		9

Minimum Required Grade: C-

Rule: A 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.

ANTY 412	Osteology	4
or ANTY 413	Forensic and Mortuary Arch	
SOCI 211S	Introduction to Criminology	3
or SOCI 221	Criminal Justice System	
Total Hours		7

Minimum Grade C-

Option Electives

Twelve (12) Credits in consultation with advisor in classes relevant to the forensic sciences, such as (but not limited to) archaeology, physical anthropology, biology, chemistry, criminology, drawing, geology, pharmacy, photography, public speaking, or psychology.

Minimum grade C-

Forensic Studies Certificate

The certificate in forensic studies is designed so that students may complete the requirements either as resident students at UM-Missoula or completely online through UM-Missoula's online facility.

To earn a certificate in forensic studies the student must complete a minimum of 18 credits, including 6 credits in core forensic science courses.

Certificate of Art - Forensic Studies

College Humanities & Sciences

Degree Specific Credits: 18

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

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

Core Courses	6
Science Electives	6
Communication Elective	3
Ethics Elective	3
Total Hours	18

Core Courses

Rule: All courses required.

CJUS 125N	Fund of Forensic Science	3
CJUS 488	Forensic Science the Crime Lab and Beyond	3
Total Hours		6

Minimum Required Grade: C-

Science Electives

Rule: Must complete 6 credits

Note: 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. Minimum grade required is C-.

Minimum Required Grade: C-

6 Total Credits Required

Communication Elective

Rule: Must complete a 3 credit course

Note: To meet this requirement, student must complete one, 3-credit course related to written, oral, or pictorial communication, including selected courses in Art, Curriculum & Instruction, Communication Studies, Computer Science, 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.

Minimum Required Grade: C-

3 Total Credits Required

Ethics Elective

Rule: Must complete a 3 credit course

Note: To meet this requirement, student must complete one, 3-credit course that has been designated as a University of Montana - Missoula General Education Group VIII (Ethics and Human Values) course in any department.

Minimum Required Grade: C-

3 Total Credits Required

Historic Preservation Certificate

Historic Preservation is the interdisciplinary field that seeks to identify, document, preserve and protect significant structures, sites and landscapes.

Certificate of Applied Science - Historic Preservation

College Humanities & Sciences

Degree Specific Credits: 21

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Note: Historic Preservation is the interdisciplinary field that seeks to identify, document, preserve and protect significant structures, sites and landscapes. To earn a certificate in historic preservation the student must complete a minimum of 21 credits.

Summary

Core Courses	12
History Electives	3
Internship or Independent Study	3
Total Hours	18

Core Courses

Rule: must complete all 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

Minimum Required Grade: C

History Electives

Rule: Must complete three credits

Select one of the following:		
HSTA 320	Birth of Modern US	3
HSTA 321	America in Crisis	

HSTA 322	U.S. History: WWII to Present	
Total Hours		3

Minimum Required Grade: C

Internship or Independent Study

Rule: Must complete three credits

Note: Internship must be with an approved, appropriate preservation-based agency or focused on an approved preservation-based topic.

Select three credits from the following:		
ANTY 398	Internship	3
ANTY 492	Independent Study	
Total Hours		3

Minimum Required Grade: C

Linguistics

Bachelor of Arts - Anthropology; Linguistics Concentration

College Humanities & Sciences

Degree Specific Credits: 39

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Note: For a degree in Anthropology with an concentration in Linguistics the student must meet all the general requirements for the major, in addition to completing LING 470, LING 473, and two courses from the following: LING 375X, 471, 472, 474, 475, 477, 478, 484, or 489.

LING 470	Linguistic Analysis	3
LING 473	Language and Culture	3
Select two of the following:		
LING 375X	Linguistic Ecology and Language Endangerment	6
LING 471	Phonetics and Phonology	
LING 472	Generative 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		12

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umd.edu/academics/general-education-requirements>) of the catalog.

Summary

Lower Division Core Courses	12
Anthropology or Cognate Electives	12
Upper Division Writing 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	
Linguistics Option Requirements	12
Option Requirements	
Option Electives	
Total Hours	51

Lower Division Core Courses

Rule: Complete all 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-

Anthropology or Cognate Electives

Rule: Complete 12 credits.

Note: Speak to your academic adviser for a full list of approved Anthropology or Cognate electives.

Minimum Required Grade: C-

12 Total Credits Required

Upper Division Writing Requirement

Rule: Complete either an upper-division writing course from approved list in catalog, or one of the following courses listed below.

Select one of the following:		3
ANTY 402	Quan Ethnographic Field Methds	
ANTY 408	Advanced Anthro Statistics	
ANTY 450	Archaeological Theory	
ANTY 455	Artifact Analysis	
LING 473	Language and Culture	
LING 484	NA Indigenous Lang & Ling	
Total Hours		3

Minimum Required Grade: C-

Subarea I-Theory and Methods

Rule: Complete 3 credits in Theory and 3 credits in Methods

Minimum Required Grade: C-

6 Total Credits Required

Anthropological Theory

Select one of the following:		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

Select 3 credits from the following:		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 431	Ethnographic Field Methods	
ANTY 451	Cultural Resource Management	
ANTY 454	Lithic Technology	
ANTY 455	Artifact Analysis	
ANTY 466	Archaeological Survey	
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

Minimum Required Grade: C

6 Total Credits Required

Subarea II: Human Adaptation and Diversity

Select one of the following:		3
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

Select one of the following: 3

ANTY 141H	The Silk Road
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	Arch of the Arctic/Subarctic
ANTY 465	Arch of the SW United States

Total Hours 3

Minimum Required Grade: C-

Subarea IV: Concepts and Issues

Select one of the following: 3

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 in NnWstrn Socts
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-

Linguistics Option Requirements

Rule: Must complete the following subcategories

12 Total Credits Required

Option Requirements

Rule: Complete all courses

LING 470	Linguistic Analysis	3
LING 473	Language and Culture	3
Total Hours		6

Minimum Required Grade: C-

Option Electives

Rule: Complete 2 courses

Select two of the following: 6

LING 375X	Linguistic Ecology and Language Endangerment
LING 471	Phonetics and Phonology
LING 472	Generative 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

Minimum Required Grade: C-

Linguistics Minor

Minor - Linguistics (Minor)

College Humanities & Sciences

Degree Specific Credits: 18

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Note: To earn a Minor in Linguistics, students must complete 18 credits beyond their major degree requirements.

Summary

Upper Division Core Courses	9
Core Course	
Additional Core Courses	
Elective Courses	9
Total Hours	18

Upper Division Core Courses

Rule: Complete the following subcategories of courses

9 Total Credits Required

Core Course**Rule:** Must complete the following course

LING 470	Linguistic Analysis	3
Total Hours		3

Minimum Required Grade: C

Additional Core Courses

Select two of the following: 6

LING 471	Phonetics and Phonology	
LING 472	Generative Syntax	
LING 489	Morphology	
Total Hours		6

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.

Select three of the following: 9

LING 270S	Intro to Linguistics	
	or LING 465 Structure & History of English	
LING 375X	Linguistic Ecology and Language Endangerment	
LING 471	Phonetics and Phonology	
LING 472	Generative Syntax	
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	
Total Hours		9

Minimum Required Grade: C

Medical Anthropology**Bachelor of Arts - Anthropology; Medical Anthropology Concentration****College Humanities & Sciences****Degree Specific Credits:** 36**Required Cumulative GPA:** 2.0**Catalog Year: 2017-2018**

Note: For a degree in Anthropology with an concentration in Medical Anthropology, the student must meet all of the general requirements for the major, including completing ANTY 426, in addition to completing three

of the following courses: ANTY 333, ANTY 418, ANTY 422, or ANTY 435. Note that in addition to fulfilling concentration requirements these ANTY courses also fulfill certain major requirements.

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

Lower Division Core Courses	12
Anthropology or Cognate Electives	12
Upper Division Writing Requirement	3
Subarea I-Theory and Methods	6
Subarea II, III, IV	6
Subarea II: Human Adaptation and Diversity	
Subarea III: World Societies and Cultures	
Subarea IV: Concepts and Issues	
Medical Anthropology Concentration	12
Concentration Requirements	
Concentration Electives	
Total Hours	51

Lower Division Core Courses**Rule:** Complete all 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

Anthropology or Cognate Electives**Rule:** Complete 12 credits.

Note: Speak to your academic adviser for a full list of approved Anthropology or Cognate electives.

Minimum Required Grade: C

12 Total Credits Required

Upper Division Writing Requirement

Rule: Complete either an upper-division writing course from approved list in catalog, or one of the following courses listed below.

Select one of the following: 3	
ANTY 402	Quan Ethnographic Field Methds
ANTY 408	Advanced Anthro Statistics
ANTY 450	Archaeological Theory
ANTY 455	Artifact Analysis
LING 473	Language and Culture

LING 484	NA Indigenous Lang & Ling	
Total Hours		3

Minimum Required Grade: C-

Subarea I-Theory and Methods

Rule: Complete 3 credits in Theory and 3 credits in Methods

Minimum Required Grade: C

6 Total Credits Required

Anthropological Theory

Select one of the following: 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

Select 3 credits from the following: 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 431	Ethnographic Field Methods
ANTY 451	Cultural Resource Management
ANTY 454	Lithic Technology
ANTY 455	Artifact Analysis
ANTY 466	Archaeological Survey
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

Minimum Required Grade: C

6 Total Credits Required

Subarea II: Human Adaptation and Diversity

Rule: Complete one of the following

Select one of the following: 3

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

Rule: Complete one of the following

Select one of the following: 3

ANTY 141H	The Silk Road
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

Total Hours 3

Minimum Required Grade: C

Subarea IV: Concepts and Issues

Rule: Complete one of the following

Select one of the following: 3

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 in NnWstrn Socts
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

Medical Anthropology Option

Rule: Must complete the following subcategories

12 Total Credits Required

Option Requirements

Rule: Complete the following course

ANTY 426	Culture, Health and Healing	3
Total Hours		3

Minimum Required Grade: C

Option Electives

Rule: Complete 3 courses

Select three of the following:

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

Minimum Required Grade: C

Applied Science Undergraduate

- Bachelor of Applied Science (p. 162)

Bachelor of Applied Science

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 (p. 354) 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 (<http://mc.umt.edu/aac/BAS/default.php>) for informational resources and to learn how to request an initial advising appointment.

Bachelor of Applied Science - Applied Science

College Humanities & Sciences

Degree Specific Credits: 127

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

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

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.

WRIT 101	College Writing I	3
or WRIT 201	College Writing II	
Total Hours		3

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.

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

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 (p. 30) 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

Biochemistry

Bruce E. Bowler, Program Director

The Biochemistry Program is a joint program between the Department of Chemistry and Biochemistry and the Division of Biological Sciences. Biochemistry is an interdisciplinary science that integrates chemistry and biology to understand the molecular basis of life. The program offers a B.S. in Biochemistry and M.S. and Ph.D. degrees in Biochemistry & Biophysics.

Undergraduate majors receive a solid foundation in both chemistry and biology. Biochemistry courses are usually taken in the junior year allowing majors to become involved in research with faculty and to take electives in their senior year. The major also introduces students to computer science and bioinformatics, essential tools in modern biochemistry. The B.S. in Biochemistry prepares students for advanced degrees in biochemistry or biophysics, for medical, dental or veterinary schools and for careers in the pharmaceutical and biotechnology industries. A Health Professions option is also offered within the B.S. in Biochemistry for students whose career goals are in fields related to biochemistry. This option allows more flexibility in upper division electives, permitting students to tailor the degree to their needs. Students desiring a basic grounding in biochemistry to complement their primary major can choose to pursue a minor in Biochemistry.

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 (<http://hs.umt.edu/biochemistry>).

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. (p. 164)
- Biochemistry B.S., Health Professions Concentrations (p. 166)

Undergraduate Minors

- Biochemistry (p. 168)

Biochemistry B.S.

The Biochemistry Program is a joint program between the Department of Chemistry and Biochemistry and the Division of Biological Sciences. Biochemistry is an interdisciplinary science that integrates chemistry and biology to understand the molecular basis of life. The program offers a B.S. in Biochemistry and M.S. and Ph.D. degrees in Biochemistry & Biophysics.

Undergraduate majors receive a solid foundation in both chemistry and biology. Biochemistry courses are usually taken in the junior year allowing majors to become involved in research with faculty and to take electives in their senior year. The major also introduces students to computer science, 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. This option allows more flexibility in upper division electives, permitting students to tailor the degree to their needs.

The graduate degrees in Biochemistry & Biophysics prepare students to be independent researchers in academic laboratories or in the biotechnology and pharmaceutical industries. Through coursework and independent research, graduate students in this program will become adept at the physical and structural methods necessary to probe important problems in the life sciences at the molecular level. In collaboration with the Center for Biomolecular Structure & Dynamics, the Biochemistry Program provides state-of-the-art facilities for research in biochemistry, biophysics and structural biology.

Prospective students desiring further information on these degrees should contact the Program Director by visiting the Biochemistry Program web site: <http://hs.umt.edu/biochemistry/>

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.

Bachelor of Science - Biochemistry

College Humanities & Sciences

Degree Specific Credits: 96

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018**General Education Requirements**

Information regarding these requirements can be found in the General Education Section (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

Lower Division Core	54
Biochemistry	
Biology	
General and Organic Chemistry	
Physics	
Mathematics	
Computer Science	
Upper Division Core	26
Biochemistry	
Biology	
Analytical Chemistry	
Inorganic Chemistry	
Physical Chemistry	
Advanced Electives	16
Total Hours	96

Lower Division Core

Rule: Must complete the following subcategories

54 Total Credits Required

Biochemistry

Rule: All of the following courses are required

BCH 110	Intro Biology for Biochemists	3
BCH 111	Intro Biol for Biochemists Lab	1
BCH 294	Seminar/Workshop	1
Total Hours		5

Minimum Required Grade: C-

Biology

Rule: All of the following courses are required

BIOB 260	Cellular and Molecular Biology	4
BIOB 272	Genetics and Evolution	4
Total Hours		8

Minimum Required Grade: C-

General and Organic Chemistry

Rule: All of the following courses are required

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 222	Organic Chemistry I Lab	2

CHMY 223	Organic Chemistry II	3
CHMY 224	Organic Chemistry II Lab	2
Total Hours		20

Minimum Required Grade: C-

Physics

Rule: All of the following courses are required

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-

Mathematics

Rule: All of the following courses are required

M 171	Calculus I	4
M 172	Calculus II	4
Total Hours		8

Minimum Required Grade: C-

Computer Science

Rule: The following course is required

Note: We advise that students take CSCI 250 in their third year after completing lower division biochemistry, biology, chemistry, mathematics and physics coursework.

CSCI 250	Computer Mdlng/Science Majors	3
Total Hours		3

Minimum Required Grade: C-

Upper Division Core

Rule: Must complete the following subcategories

26 Total Credits Required

Biochemistry

Rule: All of the following courses are required

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

Rule: The following course is required

BIOB 425	Adv Cell & Molecular Biology	3
Total Hours		3

Minimum Required Grade: C-

Analytical Chemistry**Rule:** All of the following courses are required

CHMY 311	Analytical Chem-Quant Analysis	4
CHMY 421	Advanced Instrument Analysis	4
Total Hours		8

Minimum Required Grade: C-

Inorganic Chemistry**Rule:** The following course is required

CHMY 401	Advanced Inorganic Chemistry	3
Total Hours		3

Minimum Required Grade: C-

Physical Chemistry**Rule:** Choose 1 of the following courses

Note: Students planning to attend graduate school in biochemistry or biophysics are strongly advised to take the CHMY 373-CHMY 371 sequence

CHMY 360	Applied Physical Chemistry	3-4
or CHMY 373	Phys Chem-Kntcs & Thrmdynmcs	
Total Hours		3-4

Minimum Required Grade: C-

Advanced Electives**Rule:** Choose 16 credits from the courses listed

Note: No more than 3 credits combined of BIOB 490, CHMY 490, CHMY 498 and BCH 490. No more than 3 credits combined of CHMY 397 and CHMY 494.

Select 16 credits from the following: 16

BCH 490	Undergraduate Research
BIOB 301	Developmental Biology
BIOB 375	General Genetics
BIOB 410	Immunology
BIOB 411	Immunology Laboratory
BIOB 440	Biological Electron Microscopy
BIOB 486	Genomics
BIOB 490	Adv Undergrad Research
BIOH 365	Human AP I for Health Profsns
BIOH 370	Human AP II for Health Profsns
BIOH 405	Hematology
BIOH 462	Principles Medical Physiology
BIOM 360	General Microbiology
BIOM 361	General Microbiology Lab
BIOM 400	Medical Microbiology
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 & Spctrscty	
CHMY 397	Teaching Chemistry	
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 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		16

Minimum Required Grade: C-

Biochemistry Health Professions

The B.S. in Biochemistry prepares students for advanced degrees in biochemistry or biophysics, for medical, dental or veterinary schools and for careers in the pharmaceutical and biotechnology industries. A Health Professions option is also offered within the B.S. in Biochemistry for students whose career goals are in fields related to biochemistry. This option allows more flexibility in upper division electives, permitting students to tailor the degree to their needs.

Bachelor of Science - Biochemistry; Health Professions Concentration**College Humanities & Sciences****Degree Specific Credits:** 99**Required Cumulative GPA:** 2.0**Catalog Year: 2017-2018****General Education Requirements**

Information regarding these requirements can be found in the General Education Section (<http://catalog.umd.edu/academics/general-education-requirements>) of the catalog.

Summary

Lower Division Core	50-51
Biochemistry	
Biology	
General and Organic Chemistry	
Physics	
Mathematics	
Upper Division Core	25-26
Biochemistry	
Microbiology	
Analytical Chemistry	
Inorganic Chemistry	
Physical Chemistry	

Biology Laboratory Course	
Advanced Electives	21
Ethics	3
Total Hours	99-101

Lower Division Core

Rule: Must complete the following subcategories

50 Total Credits Required

Biochemistry

Rule: All of the following courses are required

BCH 110	Intro Biology for Biochemists	3
BCH 111	Intro Biol for Biochemists Lab	1
BCH 294	Seminar/Workshop	1
Total Hours		5

Minimum Required Grade: C-

Biology

Rule: All of the following courses are required

BIOB 260	Cellular and Molecular Biology	4
BIOB 272	Genetics and Evolution	4
Total Hours		8

Minimum Required Grade: C-

General and Organic Chemistry

Rule: All of the following courses are required

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 222	Organic Chemistry I Lab	2
CHMY 223	Organic Chemistry II	3
CHMY 224	Organic Chemistry II Lab	2
Total Hours		20

Minimum Required Grade: C-

Physics

Rule: Either the PHSX 205N-PHSX 208N or the PHSX 215N-PHSX 218N sequence may be completed

Select one of the following sequences: 10

Sequence 1:

PHSX 205N	College Physics I	
PHSX 206N	College Physics I Laboratory	
PHSX 207N	College Physics II	
PHSX 208N	College Physics II Laboratory	

Sequence 2:

PHSX 215N	Fund of Physics w/Calc I	
PHSX 216N	Physics Laboratory I w/Calc	
PHSX 217N	Fund of Physics w/Calc II	

PHSX 218N	Physics Laboratory II w/Calc	
Total Hours		10

Minimum Required Grade: C-

Mathematics

Rule: Either the M 162/M 263 sequence or the M 171/M 172 sequence may be completed

Select one of the following: 7-8

M 162 & M 263	Applied Calculus and Applied Differential Equations	
M 171 & M 172	Calculus I and Calculus II	

Total Hours 7-8

Minimum Required Grade: C-

Upper Division Core

Rule: Must complete the following subcategories

25 Total Credits Required

Biochemistry

Rule: All of the following courses are required

BCH 480	Advanced Biochemistry I	3
BCH 482	Advanced Biochemistry II	3
Total Hours		6

Minimum Required Grade: C-

Microbiology

Rule: The following course is required

BIOM 360	General Microbiology (equiv to 260)	3
Total Hours		3

Minimum Required Grade: C-

Analytical Chemistry

Rule: All of the following courses are required

CHMY 311	Analytical Chem-Quant Analysis	4
CHMY 421	Advanced Instrument Analysis	4
Total Hours		8

Minimum Required Grade: C-

Inorganic Chemistry

Rule: The following course is required

CHMY 401	Advanced Inorganic Chemistry	3
Total Hours		3

Minimum Required Grade: C-

Physical Chemistry

Rule: Choose 1 of the following courses

CHMY 360	Applied Physical Chemistry	3-4
or CHMY 373	Phys Chem-Kntcs & Thrmdynmcs	
Total Hours		3-4

Minimum Required Grade: C-

Biology Laboratory Course

Rule: Choose one of the following lab courses

Select one of the following:		2
BIOB 411	Immunology Laboratory	
BIOB 440	Biological Electron Microscopy	
BIOM 361	General Microbiology Lab	
BIOM 428	General Parasitology Lab	
Total Hours		2

Minimum Required Grade: C-

Advanced Electives

Rule: Choose 21 credits from the courses listed

Note: No more than 3 credits combined of BIOB 490, CHMY 490, CHMY 498 and BCH 490. No more than 3 credits combined of CHMY 397 and CHMY 494.

Select 21 credits from the following:		21
BCH 486	Biochemistry Research Lab	
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 440	Biological Electron Microscopy	
BIOB 486	Genomics	
BIOB 490	Adv Undergrad Research	
BIOH 365	Human AP I for Health Profsns	
BIOH 370	Human AP II for Health Profsns	
BIOH 405	Hematology	
BIOH 462	Principles Medical Physiology	
BIOM 400	Medical Microbiology	
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 & Spctrsctpy	
CHMY 397	Teaching Chemistry	
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 490	Undergraduate Research	
CHMY 494	Seminar/Workshop	

CHMY 498	Internship/Cooperative Educ	
PHAR 421	Medicinal Chem I	
PHAR 422	Medicinal Chem II	
Total Hours		21

Minimum Required Grade: C-

Ethics

Rule: Complete the following course

CHMY 305E	Ethics, Literature and Writing in the Sciences	3
Total Hours		3

Minimum Required Grade: C-

Biochemistry Minor

The Biochemistry Program is a joint program between the Department of Chemistry and Biochemistry and the Division of Biological Sciences. Biochemistry is an interdisciplinary science that integrates chemistry and biology to understand the molecular basis of life. The program offers a B.S. in Biochemistry and M.S. and Ph.D. degrees in Biochemistry & Biophysics.

Undergraduate majors receive a solid foundation in both chemistry and biology. Biochemistry courses are usually taken in the junior year allowing majors to become involved in research with faculty and to take electives in their senior year. The major also introduces students to computer science, 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 Concentration is also offered within the B.S. in Biochemistry for students whose career goals are in fields related to biochemistry. This concentration allows more flexibility in upper division electives, permitting students to tailor the degree to their needs.

The graduate degrees in Biochemistry & Biophysics prepare students to be independent researchers in academic laboratories or in the biotechnology and pharmaceutical industries. Through coursework and independent research, graduate students in this program will become adept at the physical and structural methods necessary to probe important problems in the life sciences at the molecular level. In collaboration with the Center for Biomolecular Structure & Dynamics, the Biochemistry Program provides state-of-the-art facilities for research in biochemistry, biophysics and structural biology.

Prospective students desiring further information on these degrees should contact the Program Director by visiting the Biochemistry Program web site (<http://hs.umd.edu/biochemistry>): <http://hs.umd.edu/biochemistry/>

Minor - Biochemistry

College Humanities & Sciences

Degree Specific Credits: 29

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Summary

Biochemistry	4
Chemistry	16
Upper Division Biochemistry	9
Total Hours	29

Biochemistry

Rule: All courses are required

BCH 110	Intro Biology for Biochemists	3
BCH 111	Intro Biol for Biochemists Lab	1
Total Hours		4

Minimum Required Grade: C-

Chemistry

Rule: All courses are required

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

Minimum Required Grade: C-

Upper Division Biochemistry

Rule: All courses are required

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-

Biological Sciences

Charles H. Janson, Associate Dean for the Biological Sciences

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), and

- Biochemistry (an interdepartmental degree administered by the Chemistry Department).

The Division also advises students in pre-health sciences and offers a series of summer field courses at the University's Flathead Lake Biological Station (<http://flbs.umt.edu>) 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.

Graduate degrees offered by the Division of Biological Sciences include Master of Science and Doctor of Philosophy degrees in

- Cellular, Molecular and Microbial Biology (CMMB),
- Organismal Biology and Ecology (OBE), and
- Systems Ecology (SE).

The Division also participates in the graduate (M.S. and Ph.D.) program in Wildlife Biology, administered by the College of Forestry and Conservation and in the Ph.D. program in Biochemistry and Biophysics, administered by the Chemistry Department. Information on graduate study and program requirements is available from the Graduate School or the Division of Biological Sciences.

The Division offers a Bachelor of Science degree in **Biology** that provides a solid foundation in core areas of the biological sciences and in supporting physical sciences and mathematics. Several concentrations are provided 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.

The Division also offers a Bachelor of Arts degree in **Biology** with the following concentrations:

- **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.

The Division also offers a Bachelor of Science degree in **Microbiology**. 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.

The Division also offers a Bachelor of Science degree in **Medical Laboratory Science** (Michael Minnick, Professor of Microbiology, Advisor). Medical Laboratory Science (<http://hs.umt.edu/medtech>) or clinical laboratory science is 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. 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.

Degree requirements for all three majors and courses are described below (see the College of Forestry and Conservation for information about Wildlife Biology and the Biochemistry Program in the College of Humanities and Sciences for information about Biochemistry).

The Division of Biological Sciences is committed to providing coursework and experiences for non-science majors. The world faces many problems and opportunities that include significant biological components. Courses for non-science majors have the goal of fostering understanding of the process of science and enhancing biological knowledge as it relates to environmental, medical, social, and other issues. A number of introductory courses are open both to majors and non-majors. In addition, the Division offers courses designed specifically for non-majors: Microbiology for Health Sciences, Introductory Ecology, Survey of Montana Wildlife and Habitats, and others.

Undergraduate

- Biology B.A. (p. 185)
- Biology B.A., Biological Education Concentration (p. 170)
- Biology B.A., Natural History Concentration (p. 183)
- Biology B.S., Cellular & Molecular Biology Concentration (p. 172)
- Biology B.S., Ecology and Organismal Biology Concentration (p. 174)
- Biology B.S., Field Ecology Concentration (p. 177)
- Biology B.S., Genetics and Evolution Concentration (p. 179)
- Biology B.S., Human Biological Sciences (p. 181)
- Medical Laboratory Science B.S. (p. 188)
- Microbiology B.S. (p. 192)
- Microbiology B.S., Microbial Ecology Concentration (p. 190)

Undergraduate Minors

- Biology (p. 187)
- Microbiology (p. 194)

Biological Education (Teacher Preparation Biology)

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 major/teaching track within that degree program, which may contain different course requirements than the academic major since the sequence of courses is designed to meet state standards. Upon completion of the degree program with the teaching track and the secondary licensure program, one will be eligible for a standard Montana teaching license in this content area.

- Secondary Education Licensure Program (<http://www.coehs.umt.edu/departments/currinst/undergradprograms/seced/default.php>)
- Licensure Degree Requirements (p. 101)

Bachelor of Arts - Biology; Biological Education Concentration

College Humanities & Sciences

Degree Specific Credits: 62

Required Cumulative GPA: 2.75

Catalog Year: 2017-2018

Note: This option provides students with coursework in biology and related science and mathematics needed to be certified by the State of Montana to teach secondary biology (in middle and high school). This 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 and Human Sciences.

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

Biology/Microbiology Lower Division Core	17
Upper Division Core Courses Required by the Biological Education Concentration	14
Animal-Based Organismal Requirement	3
Required Content Courses Outside of the Major	28
Mathematics - Calculus	
Mathematics - Statistics	
Chemistry	
Physics	
Environmental Geosciences	

Education	
Upper Division Writing Expectation for the Major	3
Secondary Teaching Licensure	
Total Hours	65

Biology/Microbiology Lower Division Core

Rule: All of the following courses are required.

Note: The lower division core should be completed before attempting most upper division major courses.

AP Biology credit may be substituted for either BIOB 160N/BIOB 161N or BIOB 170N/BIOB 171N.

BIOB 160N	Principles of Living Systems	3
BIOB 161N	Prncpls of Living Systems Lab	1
BIOB 170N	Prncpls Biological Diversity	3
BIOB 171N	Prncpls 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

Rule: All of the following courses are required.

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 Requirement

Rule: 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 Content Courses Outside of the Major

Minimum Required Grade: C-

Mathematics - Calculus

Rule: Complete one of the following calculus courses

Note: Choose M 171, if you plan to take additional calculus courses, or if you plan a double major or minor in a field that requires more calculus (e.g. math, physics, biochemistry, computer science).

M 162	Applied Calculus	4
or M 171	Calculus I	
Total Hours		4

Minimum Required Grade: C-

Mathematics - Statistics

Rule: The following course is required

STAT 216	Introduction to Statistics	4
Total Hours		4

Minimum Required Grade: C-

Chemistry

Rule: All of the following courses are required

CHMY 123	Introduction to Organic and Biochemistry	5
& CHMY 124	and Introduction to Organic and Biochemistry Lab	

Choose one of the Chemistry sequences: 4-10

CHMY 121N Introduction to General Chemistry

CHMY 485 Laboratory Safety

Or (Required for the broadfield teaching concentration)

CHMY 141N College Chemistry I

CHMY 142N College Chemistry I Lab

CHMY 143N College Chemistry II
& CHMY 144N and College Chemistry II Lab

Total Hours 9-15

Minimum Required Grade: C-

Physics

Select one of the following Physics sequences: 10

Algebra- and Trigonometry-based:

PHSX 205N College Physics I
& PHSX 206N and College Physics I Laboratory

PHSX 207N College Physics II
& PHSX 208N and College Physics II Laboratory

Calculus-based:

PHSX 215N Fund of Physics w/Calc I
& PHSX 216N and Physics Laboratory I w/Calc (requires M 171)

PHSX 217N Fund of Physics w/Calc II
& PHSX 218N and Physics Laboratory II w/Calc

Total Hours 10

Minimum Required Grade: C-

Environmental Geosciences

Rule: 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

Rule: The following course is required

Note: The course number EDU 497 covers many different teaching method courses. The section of EDU 497 entitled "Methods: 5 - 12 Science" for 3 credits is required for the Biological Education option.

EDU 497	Teaching and Assessing	4
Total Hours		4

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)

Note: To meet 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 Biological Education concentration requires one 2/3 writing course (BIOE 371) and one 1/3 writing course (BIOO 434). No additional courses are needed to meet this requirement.

Minimum Required Grade: C-

1/3 Advanced Writing Courses

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	Vert Design & Evolution	5
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

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

BIOH 462	Principles Medical Physiology	3
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Secondary Teaching Licensure

Note: For endorsement to teach biology, a student also must gain admission to the Teacher Education Program and meet all the requirements for secondary teaching licensure (see the College of Education & Human Sciences (p. 83))

Exception to the Modern/Classical Languages Requirement

Rule: Choose one of the following Math courses

Note: The Division of Biological Sciences has been granted an exception to the Modern/Classical Language Requirement. Either of these Calculus courses (required by the major) will satisfy this requirement.

M 162	Applied Calculus	4
or M 171	Calculus I	
Total Hours		4

Minimum Required Grade: C-

Biology - Cellular and Molecular Biology**Bachelor of Science - Biology; Cellular & Molecular Biology Concentration****College Humanities & Sciences**

Degree Specific Credits: 81

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

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 (<http://catalog.umd.edu/academics/general-education-requirements>) of the catalog.

Summary

Biology/Microbiology Lower Division Core	17
Upper Division Core Courses Required by Cellular & Molecular Biology concentration	20
Additional UD Major Courses Required for the Cellular & Molecular Biology concentration	7-12
Disease Elective	
Additional UD Depth Courses (Lecture)	
Additional UD Depth Courses (Laboratory)	
Required Courses Outside of the Major	37-38
Mathematics - Calculus	
Chemistry	

Additional Depth in Chemistry	
Physics	
Upper Division Writing Expectation for the Major	7-12
Total Hours	88-99

Biology/Microbiology Lower Division Core

Rule: All of the following courses are required.

Note: The lower division core should be completed before attempting most upper division major courses.

AP Biology credit may be substituted for either BIOB 160N/BIOB 161N or BIOB 170N/BIOB 171N.

BIOB 160N	Principles of Living Systems	3
BIOB 161N	Prncpls of Living Systems Lab	1
BIOB 170N	Prncpls Biological Diversity	3
BIOB 171N	Prncpls 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 Cellular & Molecular Biology Concentration

Rule: All of the following courses are required.

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

Minimum Required Grade: C-

Additional UD Major Courses Required for the Cellular & Molecular Biology Concentration

Rule: Complete one or two courses in each subcategory (as indicated)

Minimum Required Grade: C-

Disease Elective

Select at least one of the following:		3
BIOB 410	Immunology	
BIOB 435	Virology	
Total Hours		3

Minimum Required Grade: C-

Additional UD Depth Courses (Lecture)

Select at least one of the following:		2-4
BIOB 440	Biological Electron Microscopy	
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		2-4

Minimum Required Grade: C-

Additional UD Depth Courses (Laboratory)

Select at least two of the following:		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

Minimum Required Grade: C-

Required Courses Outside of the Major

Minimum Required Grade: C-

Mathematics - Calculus

Rule: Required

M 162	Applied Calculus	4
or M 171	Calculus I	
Total Hours		4

Minimum Required Grade: C-

Chemistry

Rule: All of the following courses are required.

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 222	Organic Chemistry I Lab	2
CHMY 223	Organic Chemistry II	3
CHMY 224	Organic Chemistry II Lab	2
Total Hours		20

Minimum Required Grade: C-

Additional Depth in Chemistry

Select at least one of the following:		3-4
CHMY 311	Analytical Chem-Quant Analysis	
CHMY 360	Applied Physical Chemistry	
CHMY 373	Phys Chem-Kntcs & Thrmodynms	
Total Hours		3-4

Minimum Required Grade: C-

Physics

Rule: All of the following courses are required.

Select one of the following physics sequences: 10

Algebra- and Trigonometry-based:

PHSX 205N College Physics I
& PHSX 206N and College Physics I Laboratory

PHSX 207N College Physics II
& PHSX 208N and College Physics II Laboratory

Calculus-based:

PHSX 215N Fund of Physics w/Calc I
& PHSX 216N and Physics Laboratory I w/Calc

PHSX 217N Fund of Physics w/Calc II
& PHSX 218N and Physics Laboratory II w/Calc (require
M 171 and M 172)

Total Hours 10

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)

Note: To meet 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 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

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	Vert Design & Evolution	5
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

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

BIOH 462	Principles Medical Physiology	3
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Minimum Required Grade: C-

Exception to the Modern/Classical Languages Requirement

Rule: Choose one of the following Math courses

Note: The Division of Biological Sciences has been granted an exception to the Modern/Classical Language Requirement. Either of these Calculus courses (required by the major) will satisfy this requirement.

M 162	Applied Calculus	4
or M 171	Calculus I	

Total Hours 4

Minimum Required Grade: C-

Biology - Ecology and Organismal Biology**Bachelor of Science - Biology; Ecology and Organismal Biology Concentration****College Humanities & Sciences**

Degree Specific Credits: 69

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

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 agencies (e.g. National Biological Survey, U.S. FWS, etc.), 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 (<http://catalog.umd.edu/academics/general-education-requirements>) of the catalog.

Summary

Biology/Microbiology Lower Division Core	17
Upper Division Core Courses Required by Ecology & Organismal Biology Concentration	5

Additional Upper Division Major 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	26-42
Mathematics - Calculus	
Mathematics - Statistics	
Chemistry	
Physics	
Upper Division Writing Expectation for the Major	3-8
Total Hours	72-93

Biology/Microbiology Lower Division Core

Rule: All of the following courses are required.

Note: The lower division core should be completed before attempting most upper division major courses.

AP Biology credit may be substituted for either BIOB 160N/BIOB 161N or BIOB 170N/BIOB 171N.

BIOB 160N	Principles of Living Systems	3
BIOB 161N	Prncpls of Living Systems Lab	1
BIOB 170N	Prncpls Biological Diversity	3
BIOB 171N	Prncpls 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

Select one of the following:	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 Major Courses Required for the Ecology & Organismal Biology Concentration

Rule: Complete a minimum of 21 credits of UD BIOB, BIOE, BIOH, BIOL, BIOM, BIOO, or BCH, with at least one course from each subcategory

Note: Other recommended courses include BCH 380 or BCH 480-BCH 482.

Minimum Required Grade: C-

21 Total Credits Required

Organismal Course Requirement

Rule: Complete at least one organismal course (lab must also be taken, if available) from the following list

Select at least one of the following:	3-5
BIOB 301	Developmental Biology
BIOB 375	General Genetics
BIOB 468	Endocrinology
BIOE 403	Vert Design & Evolution
BIOL 435	Comparative Animal Physiology
BIOO 433 & BIOO 434	Plant Physiology and Plant Physiology Lab
Total Hours	3-5

Minimum Required Grade: C-

-ology Course Requirement

Rule: Complete at least one course with a focus on a group of organisms (lab must also be taken, if available) from the following list

Select at least one of the following:	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 Mgmt of Fishes
BIOO 462	Entomology
BIOO 470	Ornithology
BIOO 475	Mammalogy
Total Hours	3-5

Minimum Required Grade: C-

Specialized Ecology Course Requirement

Select at least one of the following:	3-5
BIOE 428	Freshwater Ecology
BIOE 448	Terrestrial Plant Ecology
BIOE 449	Plant Biogeography
BIOM 415	Microbial Dvrsty Eclgy & Evltn
WILD 346	Wildlife Physiological Ecology
WILD 470	Conserv of Wildlife Populatns

Flathead Lake Biological Station courses:

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

Select at least one of the following: 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

Minimum Required Grade: C-

Mathematics - Calculus**Rule:** Complete one of the following calculus courses

Note: Choose M 171, if you plan to take additional calculus courses, or if you plan a double major or minor in a field that requires more calculus (e.g. math, physics, biochemistry, computer science).

M 162	Applied Calculus	4
or M 171	Calculus I	

Total Hours 4

Minimum Required Grade: C-

Mathematics - Statistics

Note: Choose the full year of statistics for graduate preparation in ecology.

Select 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

Note: Choose the advanced sequence for graduate preparation in organismal biology, or if you are pre-veterinary.

Select either one or two years of chemistry from the following: 8-20

One Year:		
CHMY 121N	Introduction to General Chemistry	
CHMY 123 & CHMY 124	Introduction to Organic and Biochemistry and Introduction to Organic and Biochemistry Lab	
Two Years:		
CHMY 141N	College Chemistry I	
CHMY 142N	College Chemistry I Lab	
CHMY 143N	College Chemistry II	

CHMY 144N	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		8-20

Minimum Required Grade: C-

Physics

Select 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 (require M 171 and M 172)	

Total Hours 10

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)

Note: To meet 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.

Minimum Required Grade: C-

1/3 Advanced Writing Courses

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	Vert Design & Evolution	5
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

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

BIOH 462	Principles Medical Physiology	3
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Exception to the Modern/Classical Languages Requirement

Rule: Choose one of the following Math courses

Note: The Division of Biological Sciences has been granted an exception to the Modern/Classical Language Requirement. Either of these Calculus courses (required by the major) will satisfy this requirement.

M 162	Applied Calculus	4
or M 171	Calculus I	

Total Hours		4
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Minimum Required Grade: C-

**Biology - Field Ecology
Bachelor of Science - Biology; Field Ecology Concentration**

College Humanities & Sciences

Degree Specific Credits: 69

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

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 (<http://flbs.umt.edu>). 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 (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

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	26-42
Mathematics - Calculus	
Mathematics - Statistics	
Chemistry	
Physics	
Upper Division Writing Expectations for the Major	8-13
Total Hours	77-98

Biology/Microbiology Lower Division Core

Rule: All of the following courses are required.

Note: The lower division core should be completed before attempting most upper division major courses.

AP Biology credit may be substituted for either BIOB 160N/BIOB 161N or BIOB 170N/BIOB 171N.

BIOB 160N	Principles of Living Systems	3
BIOB 161N	Prncpls of Living Systems Lab	1
BIOB 170N	Prncpls Biological Diversity	3
BIOB 171N	Prncpls 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 for the Field Ecology Concentration

Select one of the following:	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

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, with at least one course from each subcategory

Minimum Required Grade: C-

8 Total Credits Required

Evolution Course Requirement

Rule: Complete at least one evolutionary biology course from the following list

Select at least one of the following:	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-

-Ology Course Requirement

Select at least one of the following:	3-5
BIOM 360 General Microbiology & BIOM 361 and General Microbiology Lab (equiv to 260)	
BIOM 427 General Parasitology & BIOM 428 and General Parasitology Lab	
BIOO 320 General Botany	
BIOO 335 Rocky Mountain Flora	
BIOO 340 Biology and Mgmt of Fishes	
BIOO 462 Entomology	
BIOO 470 Ornithology	
BIOO 475 Mammalogy	
Total Hours	3-5

Minimum Required Grade: C-

Ecology Requirement at the Flathead Lake Biological Station

Rule: Complete either the Aquatic Emphasis or the Terrestrial Emphasis

Minimum Required Grade: C-

Aquatic Emphasis

Rule: All of the following courses are required for the Aquatic Emphasis

BIOE 439 Stream Ecology	3
BIOE 440 Conservation Ecology	3
BIOE 451 Landscape Ecology	3
BIOE 453 Ecology of Small & Large Lakes	3
BIOL 492 Seminars in Ecol & Res Man	1
Total Hours	13

Minimum Required Grade: C-

Terrestrial Emphasis

Rule: All of the following courses are required for the Terrestrial Emphasis

BIOE 416 Alpine Ecology	3
BIOE 440 Conservation Ecology	3
BIOE 451 Landscape Ecology	3
BIOE 458 Forest and Grassland Ecol	3

BIOL 492 Seminars in Ecol & Res Man	1
Total Hours	13

Minimum Required Grade: C-

Required Courses Outside of the Major

Minimum Required Grade: C-

Mathematics - Calculus

Rule: Required

M 162 Applied Calculus or M 171 Calculus I	4
Total Hours	4

Minimum Required Grade: C-

Mathematics - Statistics

Select 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 Statistical Methods I & STAT 452 and Statistical Methods II	
STAT 457 Computer Data Analysis I & STAT 458 and Computer Data Analysis II	
Total Hours	4-8

Minimum Required Grade: C-

Chemistry

Select either one or two years of chemistry from the following: 8-20

One Year:	
CHMY 121N Introduction to General Chemistry	
CHMY 123 Introduction to Organic and Biochemistry & CHMY 124 and Introduction to Organic and Biochemistry Lab	
Two Years:	
CHMY 141N College Chemistry I	
CHMY 142N College Chemistry I Lab	
CHMY 143N College Chemistry II	
CHMY 144N College Chemistry II Lab	
CHMY 221 Organic Chemistry I & CHMY 222 and Organic Chemistry I Lab	
CHMY 223 Organic Chemistry II & CHMY 224 and Organic Chemistry II Lab	
Total Hours	8-20

Minimum Required Grade: C-

Physics

Select one of the following physics sequences: 10

Algebra- and Trigonometry-based:	
PHSX 205N College Physics I & PHSX 206N 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	
Total Hours		10
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)

Note: To meet 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.

Minimum Required Grade: C-

1/3 Advanced Writing Courses

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	Vert Design & Evolution	5
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

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

BIOH 462	Principles Medical Physiology	3
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Exception to the Modern/Classical Languages Requirement

Rule: Choose one of the following Math courses

Note: The Division of Biological Sciences has been granted an exception to the Modern/Classical Language Requirement. Either of these Calculus courses (required by the major) will satisfy this requirement.

M 162	Applied Calculus	4
or M 171	Calculus I	
Total Hours		4

Minimum Required Grade: C-

Biology - Genetics and Evolution Bachelor of Science - Biology; Genetics and Evolution Concentration

College Humanities & Sciences

Degree Specific Credits: 70

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

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 (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

Biology/Microbiology Lower Division Core	17
Upper Division Core Courses Required by the Genetics & Evolution Concentration	11
Additional UD Major Courses Required for the Genetics & Evolution Concentration	16-22
Biochemistry	
Genetics/Evolution Depth Courses	
Physiology Requirement	
Required Courses Outside of the Major	26-42
Mathematics - Calculus	
Mathematics - Statistics	
Chemistry	
Physics	

Upper Division Writing Expectation for the Major	3-8
Total Hours	73-100

Biology/Microbiology Lower Division Core

Rule: All of the following courses are required.

Note: The lower division core should be completed before attempting most upper division major courses.

AP Biology credit may be substituted for either BIOB 160N/BIOB 161N or BIOB 170N/BIOB 171N.

BIOB 160N	Principles of Living Systems	3
BIOB 161N	Prncpls of Living Systems Lab	1
BIOB 170N	Prncpls Biological Diversity	3
BIOB 171N	Prncpls 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 Genetics & Evolution Concentration

Rule: All of the following courses are required.

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

Minimum Required Grade: C-

Additional UD Major Courses Required for the Genetics & Evolution Concentration

Minimum Required Grade: C-

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.

Select one of the following: 4-6

BCH 380	Biochemistry	
BCH 480 & BCH 482	Advanced Biochemistry I and Advanced Biochemistry II	
Total Hours		4-6

Minimum Required Grade: C-

Genetics/Evolution Depth Courses

Select at least three of the following: 9-12

BIOB 480	Conservation Genetics	
BIOB 483	Phylogenics and Evolution	
BIOB 488	Programming for Biology	
BIOE 403	Vert Design & Evolution	
BIOE 406	Behavior & Evolution	

BIOL 484	Plant Evolution	
BIOM 410	Microbial Genetics	
BIOM 415	Microbial Dvrsty Eclgy & Evltn	
CSCI 451	Computational Biology	
Total Hours		9-12

Minimum Required Grade: C-

Physiology Requirement

Select at least one of the following (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

Minimum Required Grade: C-

Required Courses Outside of the Major

Minimum Required Grade: C-

Mathematics - Calculus

Rule: Complete one of the following calculus courses

Note: Choose M 171 if you plan to take additional calculus courses, or if you plan a double major or minor in a field that requires more calculus (e.g. math, physics, biochemistry, computer science).

M 162	Applied Calculus	4
or M 171	Calculus I	
Total Hours		4

Minimum Required Grade: C-

Mathematics - Statistics

Select 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

Select either one or two years of chemistry from the following: 8-20

One Year:		
CHMY 121N	Introduction to General Chemistry	
CHMY 123 & CHMY 124	Introduction to Organic and Biochemistry and Introduction to Organic and Biochemistry Lab	

Two Years:

CHMY 141N	College Chemistry I
CHMY 142N	College Chemistry I Lab
CHMY 143N	College Chemistry II
CHMY 144N	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 8-20

Minimum Required Grade: C-

Physics**Rule:** All of the following courses are required

Select 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

Total Hours 10

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)**Note:** To meet 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.

Minimum Required Grade: C-

1/3 Advanced Writing Courses

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	Vert Design & Evolution	5
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

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

BIOH 462	Principles Medical Physiology	3
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Exception to the Modern/Classical Languages Requirement**Rule:** Choose one of the following Math courses**Note:** The Division of Biological Sciences has been granted an exception to the Modern/Classical Language Requirement. Either of these Calculus courses (required by the major) will satisfy this requirement.

M 162	Applied Calculus	4
or M 171	Calculus I	

Total Hours 4

Minimum Required Grade: C-

Biology - Human Biological Sciences**Bachelor of Science - Biology; Human Biological Sciences Concentration****College Humanities & Sciences****Degree Specific Credits:** 73**Required Cumulative GPA:** 2.0**Catalog Year: 2017-2018****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 (<http://catalog.umd.edu/academics/general-education-requirements>) of the catalog.

Summary

Biology/Microbiology Lower Division Core	17
Upper Division Core Courses Required by Human Biological Sciences Concentration	14
Additional Upper Division Major Courses Required for the Human Biological Sciences Concentration	13-20
Biochemistry Requirement	
Microbiology Requirement	
Additional Depth in Human Biological Sciences	
Required Courses Outside of the Major	30-42
Mathematics and Psychology	
Chemistry	
Physics	
Upper Division Writing Expectation for the Major	3-15
Total Hours	77-108

Biology/Microbiology Lower Division Core

Rule: All of the following courses are required.

Note: The lower division core should be completed before attempting most upper division major courses.

AP Biology credit may be substituted for either BIOB 160N/BIOB 161N or BIOB 170N/BIOB 171N.

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

Rule: All of the following courses are required.

BIOB 301	Developmental Biology	3
BIOB 375	General Genetics	3
BIOH 365	Human AP I for Health Profsns	4
BIOH 370	Human AP II for Health Profsns	4
Total Hours		14

Minimum Required Grade: C-

Additional Upper Division Major Courses Required for the Human Biological Sciences Concentration

Minimum Required Grade: C-

Biochemistry Requirement

Select one of the following: 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-

Microbiology Requirement

Select one of the following: 3-5

BIOB 360 & BIOM 361	General Microbiology and General Microbiology Lab (equiv to 260 & 261)	
BIOM 400	Medical Microbiology	
Total Hours		3-5

Minimum Required Grade: C-

Additional Depth in Human Biological Sciences

Complete at least two courses from the following: 6-9

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	Vert Design & Evolution	
BIOE 406	Behavior & Evolution	
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		6-9

Minimum Required Grade: C-

Required Courses Outside of the Major

Minimum Required Grade: C-

Mathematics and Psychology

Rule: All of the following courses are required

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

Note: If you plan to apply to a graduate or professional school such as medical or dental, you should plan to complete the advanced chemistry

sequence. If you plan to pursue nursing or a graduate program in physical therapy, the introductory chemistry sequence is 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 right for you.

Select either one or two years of chemistry from the following: 8-20

One Year:

CHMY 121N	Introduction to General Chemistry
CHMY 123 & CHMY 124	Introduction to Organic and Biochemistry and Introduction to Organic and Biochemistry Lab

Two Years:

CHMY 141N	College Chemistry I
CHMY 142N	College Chemistry I Lab
CHMY 143N	College Chemistry II
CHMY 144N	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 8-20

Minimum Required Grade: C-

Physics

Rule: All of the following courses are required.

Select 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

Total Hours 10

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)

Note: To meet 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.

Minimum Required Grade: C-

1/3 Advanced Writing Courses

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	Vert Design & Evolution	5
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

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

BIOH 462	Principles Medical Physiology	3
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Exception to the Modern/Classical Languages Requirement

Rule: Choose one of the following Math courses

Note: The Division of Biological Sciences has been granted an exception to the Modern/Classical Language Requirement. Either of these Calculus courses (required by the major) will satisfy this requirement.

M 162 or M 171	Applied Calculus Calculus I	4
Total Hours		4

Minimum Required Grade: C-

Biology - Natural History

Bachelor of Arts - Biology; Natural History Concentration

College Humanities & Sciences

Degree Specific Credits: 73

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

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 (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

Biology/Microbiology Lower Division Core	17
Upper Division Core Courses Required by Natural History Concentration	20
Additional Upper Division Major Courses Required for Natural History Concentration	4
Required Courses Outside of the Major	32
Chemistry and Geology	
Cognate Electives	
Upper Division Writing Expectation for the Major	6-7
Total Hours	79-80

Biology/Microbiology Lower Division Core

Rule: All of the following courses are required.

Note: The lower division core should be completed before attempting most upper division major courses.

AP Biology credit may be substituted for either BIOB 160N/BIOB 161N or BIOB 170N/BIOB 171N.

BIOB 160N	Principles of Living Systems	3
BIOB 161N	Prncpls of Living Systems Lab	1
BIOB 170N	Prncpls Biological Diversity	3
BIOB 171N	Prncpls 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

Rule: All of the following courses are required.

Select one of the following:	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)	
BIOE 406	Behavior & Evolution	3
BIOO 320	General Botany	5
BIOO 335	Rocky Mountain Flora	3

BIOO 462	Entomology	4
Total Hours		20

Minimum Required Grade: C-

Additional Upper Division Major Courses Required for Natural History Concentration

Rule: Complete one of the following courses

BIOO 470 or BIOO 475	Ornithology Mammalogy	4
Total Hours		4

Minimum Required Grade: C-

Required Courses Outside of the Major

Minimum Required Grade: C-

Chemistry and Geology

Rule: Complete all of the following courses

CHMY 121N	Introduction to General Chemistry	3
CHMY 123	Introduction to Organic and Biochemistry	3
CHMY 124	Introduction to Organic and Biochemistry Lab	2
GEO 101N	Introduction to Physical Geology	3
GEO 102N	Introduction to Physical Geology Lab	1
Total Hours		12

Minimum Required Grade: C-

Cognate Electives

Rule: Complete 20 credits from the following disciplines (maximum of 10 credits/discipline): ANTY, ASTR, CHMY (excluding CHMY 121N, CHMY 123, CHMY 124), GPHY, GEO (excluding GEO 101N, GEO 102N), FORS, M, PHSX, STAT, or WILD

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 20 credits in English - writing, journalism, photography, art, foreign language, business management, or other appropriate field.

Advanced College Writing Requirement for the Major

Rule: Complete the equivalent of a full writing course (either three 1/3 writing courses or one 2/3 writing course + one 1/3 writing course or one complete writing course).

Note: To meet 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 Natural History concentration requires one 2/3 writing course (BIOE 371) and several 1/3 writing courses (BIOO 320, BIOO 470 or BIOO 475). No additional writing courses must be taken to meet this requirement.

Minimum Required Grade: C-

Exception to the Modern/Classical Languages Requirement

Rule: Choose one of the following Math courses

Note: The Division of Biological Sciences has been granted an exception to the Modern/Classical Language Requirement. Either of these Calculus courses will satisfy this requirement. The Natural History concentration does not require a calculus course; the Natural History student may choose to take one year of a modern or classical language, or they may take one of these calculus courses (which will count towards a cognate elective).

M 162	Applied Calculus	4
or M 171	Calculus I	
Total Hours		4

Minimum Required Grade: C-

Biology - Teacher Preparation General Science Broadfield

Bachelor of Arts - Biology - General Science Broadfield

College Humanities & Sciences

Degree Specific Credits: 72

Required Cumulative GPA: 2.75

Catalog Year: 2017-2018

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umn.edu/academics/general-education-requirements>) of the catalog.

Summary

Lower Division Courses in the Content Areas	52
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 Content Courses Outside of the Major	8
Mathematics - Calculus	
Mathematics - Statistics	
Upper Division Writing Expectation for the Major	6
Total Hours	71

Lower Division Courses in the Content Areas - Biology, Chemistry, Earth Sciences, and Physics

Note: A minimum of 10 credits is required in each of the four content areas.

Biology Content Courses

Rule: All of the following courses are required

Note: AP Biology will substitute for either BIOB 160N/BIOB 161N or BIOB 170N/BIOB 171N.

BIOB 160N	Principles of Living Systems	3
BIOB 161N	Prncpls of Living Systems Lab	1
BIOB 170N	Prncpls Biological Diversity	3
BIOB 171N	Prncpls 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

Rule: All of the following courses are required.

Note: CHMY 141N/CHMY 142N & CHMY 143N/CHMY 144N should be completed before attempting CHMY 123.

CHMY 123	Introduction to Organic and Biochemistry	3.000
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 485	Laboratory Safety	1
Total Hours		14

Minimum Required Grade: C-

Earth Sciences Content Courses

Rule: All of the following courses are required

Note: ASTR 132N/ASTR 135N are NOT acceptable substitutes for ASTR 131N/ASTR 134N.

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

Rule: Complete at least one of the following courses

GEO 105N	Oceanography	3
or GEO 103N	Introduction to Environmental Geology	

Minimum Required Grade: C-

Physics Content Courses

Select one of the following physics sequences: 10

Algebra- and Trigonometry-based:

PHSX 205N College Physics I
& PHSX 206N and College Physics I Laboratory

PHSX 207N College Physics II
& PHSX 208N and College Physics II Laboratory

Calculus-based:

PHSX 215N Fund of Physics w/Calc I
& PHSX 216N and Physics Laboratory I w/Calc

PHSX 217N Fund of Physics w/Calc II
& PHSX 218N and Physics Laboratory II w/Calc (require
M 171 and M 172)

Total Hours 10

Minimum Required Grade: C-

Upper Division Content Courses

Rule: All of the following courses are required.

BIOE 370 General Ecology 3

BIOE 371 Gen Ecology Lab (equiv to 271) 2

Total Hours 5

Minimum Required Grade: C-

Required Content Courses Outside of the Major

Minimum Required Grade: C-

Mathematics - Calculus

Rule: Complete one of the following calculus courses

Note: Choose M 171, if you plan to take additional calculus courses, or if you plan a double major or minor in a field that requires more calculus (e.g. math, physics, biochemistry, computer science).

M 162 Applied Calculus 4

or M 171 Calculus I

Total Hours 4

Minimum Required Grade: C-

Mathematics - Statistics

Rule: The following course is required

STAT 216 Introduction to Statistics 4

Total Hours 4

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).

Note: To meet 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 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 B100 434 (taken with B100 433), which are required for the Teaching Biology endorsement.

Minimum Required Grade: C-

1/3 Advanced Writing Courses

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 Vert Design & Evolution 5

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

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

BIOH 462 Principles Medical Physiology 3

Exception to the Modern/Classical Languages Requirement

Rule: Choose one of the following Math courses

Note: The Division of Biological Sciences has been granted an exception to the Modern/Classical Language Requirement. Either of these Calculus courses (required by the major) will satisfy this requirement.

M 162 Applied Calculus 4

or M 171 Calculus I

Total Hours 4

Minimum Required Grade: C-

Teaching General Science Broadfield Track

Individuals interested in teaching in K-12 schools must complete a degree in the content area they want to teach plus the teacher preparation program through the Department of Curriculum and Instruction.

Individuals must complete the teaching major/teaching track within that degree program, which may contain different course requirements than the academic major since the sequence of courses is designed to meet state standards. Upon completion of the degree program with the teaching track and the secondary licensure program, one will be eligible for a standard Montana teaching license in this content area.

- Secondary Education Licensure Program (<http://www.coehs.umt.edu/departments/currinst/undergradprograms/seced/default.php>)
- Licensure Degree Requirements (p. 101)

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.

Note: This option provides students with coursework in biology, chemistry, physics, earth sciences and mathematics needed to be certified by the State of Montana in broad-field science. This allows students to teach secondary sciences—biology, chemistry, physics, and earth science (in middle and high schools). This option is appropriate for students interested in teaching science in smaller, more rural schools. In order to be licensed to teach secondary science, students must be admitted to the Teacher Education Program through the Phyllis J. Washington College of Education and Human Sciences.

Education

Rule: The following course is required

Note: The course number EDU 497 covers many different teaching methods courses. The section of EDU 497 entitled "Methods: 5 - 12 Science" is required for the General Science Broadfield.

EDU 497	Teaching and Assessing	4
Total Hours		4

Minimum Required Grade: C-

Secondary Teaching Licensure

Note: For endorsement to teach general science, a student also must gain admission to the Teacher Education Program and meet all the requirements for secondary teaching licensure (see the College of Education & Human Sciences (p. 83))

Biology Minor

Minor - Biology

College Humanities & Sciences

Degree Specific Credits: 25

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Summary

Biology/Microbiology Lower Division Core	17
Upper Division Biology Requirement for the Minor	8
Total Hours	25

Biology/Microbiology Lower Division Core

Rule: All of the following courses are required.

Note: The lower division core should be completed before attempting most upper division BIO- courses.

AP Biology may be substituted for either BIOB 160N/BIOB 161N or BIOB 170N/BIOB 171N.

BIOB 160N	Principles of Living Systems	3
BIOB 161N	Prncpls of Living Systems Lab	1
BIOB 170N	Prncpls Biological Diversity	3
BIOB 171N	Prncpls 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 Biology Requirement for the Minor

Rule: Complete 8 credits of Upper Division in Biology (BIOB, BIOE, BIOH, BIOL, or B100)

Note: These eight credits may not include BIOG, BCH, or BIOM courses.

Minimum Required Grade: C-

8 Total Credits Required

Teaching Biology Track

A teaching minor is an academic minor which may contain different course requirements designed to meet state standards. Those interested in teaching in K-12 schools must complete a teaching major in a content area plus the teacher preparation program through the Department of Curriculum and Instruction. Additional teaching areas can be added through completion of either a teaching major or a teaching minor in that content area.

- Secondary Education Licensure Program (<http://www.coehs.umt.edu/departments/currinst/undergradprograms/seced/default.php>)
- Licensure Degree Requirements (p. 101)

To sign up for this option, you need to contact the Curriculum and Instruction Department. Do not fill out a major/minor form for graduation or the major/minor/concentration section of the major change form. Approvals for this option must come from the Curriculum and Instruction Department.

Tracks will not appear on your UM transcript, diploma, university lists, student data system, or university publication and are used for advising purposes only. You do not fill out a major change for a track.

Note: In order to be licensed to teach secondary biology, students must be admitted to the Teacher Education Program through the Phyllis J. Washington College of Education and Human Sciences.

Upper Division Core Courses Required by the Biology Teaching Minor

Rule: All of the following courses are required.

BIOM 360	General Microbiology	3
BIOM 361	General Microbiology Lab	2
Total Hours		5

Minimum Required Grade: C-

Required Content Courses Outside of the Major

Minimum Required Grade: C-

Mathematics - Calculus

Rule: Complete one of the following calculus courses

Note: Choose M 171, if you plan to take additional calculus courses, or if you plan a double major or minor in a field that requires more calculus (e.g. math, physics, biochemistry, computer science).

M 162	Applied Calculus	4
or M 171	Calculus I	
Total Hours		4

Minimum Required Grade: C-

Mathematics - Statistics

Rule: The following course is required

STAT 216	Introduction to Statistics	4
Total Hours		4

Minimum Required Grade: C-

Chemistry

Rule: All of the following courses are required

CHMY 121N	Introduction to General Chemistry	3
CHMY 123	Introduction to Organic and Biochemistry	3.000
CHMY 485	Laboratory Safety	1
Total Hours		7

Minimum Required Grade: C-

Environmental Geosciences

Rule: 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

Rule: The following course is required

Note: The course number EDU 497 covers many different teaching method courses. The section of EDU 497 entitled "Methods: 5 - 12 Science" is required for the Teaching Biology minor.

EDU 497	Teaching and Assessing	4
Total Hours		4

Minimum Required Grade: C-

Secondary Teaching Licensure

Note: For endorsement to teach biology, a student also must gain admission to the Teacher Education Program and meet all the requirements for secondary teaching licensure (see the College of Education & Human Sciences (p. 83))

Medical Laboratory Science

Bachelor of Science - Medical Laboratory Science

College Humanities & Sciences

Degree Specific Credits: 86 - 93

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

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 (<http://catalog.umd.edu/academics/general-education-requirements>) of the catalog.

Summary

Lower Division Biology Courses	8
Required Major Courses for Medical Technology 4 + 1 or 3 + 1	31-38
Required Courses Outside the Major	42
Mathematics - Calculus	
Mathematics - Statistics	
Chemistry	
Physics	
Upper Division Writing Expectation for the Major	5
Total Hours	86-93

Lower Division Biology Courses

Rule: All of the following courses are required.

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.

BIOB 260	Cellular and Molecular Biology	4
BIOB 272	Genetics and Evolution	4
Total Hours		8

Minimum Required Grade: C-

Required Courses Outside the Major

Mathematics - Calculus

Rule: Complete one of the following calculus courses

M 162	Applied Calculus	4
or M 171	Calculus I	
Total Hours		4

Minimum Required Grade: C-

Mathematics - Statistics

Rule: The following course is required

STAT 216	Introduction to Statistics	4
Total Hours		4

Minimum Required Grade: C-

Physics

Rule: All of the following courses are required

Select one of the following physics sequences: 10

Algebra- and Trigonometry-based:

PHSX 205N College Physics I
& PHSX 206N and College Physics I Laboratory

PHSX 207N College Physics II
& PHSX 208N and College Physics II Laboratory

Calculus-based:

PHSX 215N Fund of Physics w/Calc I
& PHSX 216N and Physics Laboratory I w/Calc

PHSX 217N Fund of Physics w/Calc II
& PHSX 218N and Physics Laboratory II w/Calc

Total Hours 10

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).

Note: 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).

Note: 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 many of the clinical practicum affiliates).

Minimum Required Grade: C-

1/3 Advanced Writing Courses

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	Vert Design & Evolution	5
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

2/3 Advanced Writing Courses

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

Complete Advanced Writing Course

BIOH 462	Principles Medical Physiology	3
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Exception to the Modern/Classical Languages Requirement

Rule: Choose one of the following Math courses

Note: The Division of Biological Sciences has been granted an exception to the Modern/Classical Languages Requirement. Either of these calculus courses (required by the major) will satisfy this requirement.

M 162	Applied Calculus	4
or M 171	Calculus I	
Total Hours		4

Minimum Required Grade: C-

Bachelor of Science - Medical Laboratory Science; Track: 4 + 1

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

Rule: All of the following courses are required

Select one of the following:

BCH 380	Biochemistry	4
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or BCH 480 & BCH 482	Advanced Biochemistry I and Advanced Biochemistry II	
BIOB 410	Immunology	3
BIOB 411	Immunology Laboratory	2
BIOH 365	Human AP I for Health Profsns	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 Bacteriology & 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

Chemistry

Rule: All of the following courses are required

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 222	Organic Chemistry I Lab	2
CHMY 223	Organic Chemistry II	3
CHMY 224	Organic Chemistry II Lab	2
CHMY 311	Analytical Chem-Quant Analysis	4
Total Hours		24

Bachelor of Science - Medical Laboratory Science; Track: 3 + 1

The 3+1 track is the faster option, as the clinical practicum year is part of the degree. Three years are spent on the UM campus, and then the clinical practicum year with the MUS CLS program (or with one of our affiliated programs) is the fourth year of the Bachelor's degree. Note: this degree requires a total of 130 credits.

Required Major Courses for Medical Laboratory Science 3 + 1

Rule: All of the following courses are required

BCH 380	Biochemistry	4
BIOB 410	Immunology	3
BIOH 365	Human AP I for Health Profsns	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 Bacteriology & Myclgy Lb	2
BIOM 427	General Parasitology	2
BIOM 428	General Parasitology Lab	2
BIOM 435	Virology	3
Total Hours		31

Minimum Required Grade: C-

Required Professional Practicum

Rule: All of the following courses are required

Note: You must apply for the professional practicum to one of our affiliated programs during the autumn prior to enrollment. To be competitive for this practicum, you must be in good academic standing with a minimum GPA of ~3.0, and demonstrate a commitment to the clinical laboratory profession. For more information, visit the Medical Laboratory Sciences website (<http://hs.umt.edu/medtech>). Contact Dr. Mike Minnick to apply for the practicum.

BIOH 470	Summer Clinical Laboratory	12
BIOH 471	Professional Training I	13
BIOH 472	Professional Training II	12
Total Hours		37

Minimum Required Grade: C-

Chemistry

Rule: All of the following courses are required

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 222	Organic Chemistry I Lab	2
Total Hours		15

Minimum Required Grade: C-

Microbiology - Microbial Ecology

Bachelor of Science - Microbiology; Microbial Ecology Concentration

College Humanities & Sciences

Degree Specific Credits: 76

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

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 (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

Biology/Microbiology Lower Division Core	17
Upper Division Microbiology Core Courses	19
Additional UD Major Courses Required for Microbial Ecology Concentration	11-15
Biochemistry	
Additional UD Depth Courses in Microbiology	
Required Courses Outside of the Major	27-39
Mathematics - Calculus	
Mathematics - Statistics	
Chemistry	
Physics	
Additional Science Requirement	
Upper Division Writing Expectation for the Major	2-7
Total Hours	76-97

Biology/Microbiology Lower Division Core

Rule: All of the following courses are required.

Note: The lower division core should be completed before attempting most upper division major courses.

AP Biology credit may be substituted for either BIOB 160N/BIOB 161N or BIOB 170N/BIOB 171N.

BIOB 160N	Principles of Living Systems	3
BIOB 161N	Prncpls of Living Systems Lab	1
BIOB 170N	Prncpls Biological Diversity	3
BIOB 171N	Prncpls 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 Microbiology Core Courses

Rule: All of the following courses are required.

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

Minimum Required Grade: C-

Additional UD Major Courses Required for Microbial Ecology Concentration

Minimum Required Grade: C-

Biochemistry

Select either one semester or one year of biochemistry from the following: 4-6

One Semester:	
BCH 380	Biochemistry
One Year:	
BCH 480	Advanced Biochemistry I
BCH 482	Advanced Biochemistry II
Total Hours	4-6

Minimum Required Grade: C-

Additional UD Depth Courses in Microbiology

Select 7-9 credits from the following (labs must be taken if available): 7-9

BIOB 410 & BIOB 411	Immunology and Immunology Laboratory
BIOB 440	Biological Electron Microscopy
BIOE 371	Gen Ecology Lab (equiv to 271)
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

Minimum Required Grade: C-

Required Courses Outside of the Major

Minimum Required Grade: C-

Mathematics - Calculus

Rule: Complete one of the following calculus courses

M 162	Applied Calculus	4
or M 171	Calculus I	
Total Hours		4

Minimum Required Grade: C-

Mathematics - Statistics

Rule: The following course is required

STAT 216	Introduction to Statistics	4
Total Hours		4

Minimum Required Grade: C-

Chemistry

Select either one or two years of chemistry from the following: 8-20

One Year:	
CHMY 121N	Introduction to General Chemistry

CHMY 123 & CHMY 124	Introduction to Organic and Biochemistry and Introduction to Organic and Biochemistry Lab
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Two Years:

CHMY 141N	College Chemistry I
CHMY 142N	College Chemistry I Lab
CHMY 143N	College Chemistry II
CHMY 144N	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 8-20

Minimum Required Grade: C-

Physics**Rule:** The following courses are required.

Select one of the following physics sequences: 5

Algebra- and Trigonometry-based:	
PHSX 205N & PHSX 206N	College Physics I and College Physics I Laboratory

Calculus-based:	
PHSX 215N & PHSX 216N	Fund of Physics w/Calc I and Physics Laboratory I w/Calc

Total Hours 5

Minimum Required Grade: C-

Additional Science Requirement

Select at least 6 credits from the following: 6

CHMY 311	Analytical Chem-Quant Analysis
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

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).**Note:** 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.

Minimum Required Grade: C-

1/3 Advanced Writing Courses

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	Vert Design & Evolution	5
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

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 Genetics Lab	1
BIOM 499	Undergraduate Thesis	3-6

Minimum Required Grade: C-

Complete Advanced Writing Course

BIOH 462	Principles Medical Physiology	3
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Exception to the Modern/Classical Languages Requirement**Rule:** Choose one of the following Math courses**Note:** The Division of Biological Sciences has been granted an exception to the Modern/Classical Language Requirement. Either of these Calculus courses (required by the major) will satisfy this requirement.

M 162 or M 171	Applied Calculus Calculus I	4
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Total Hours 4

Minimum Required Grade: C-

Microbiology B.S.

Bachelor of Science - Microbiology

College Humanities & Sciences

Degree Specific Credits: 91

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

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 (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

Biology/Microbiology Lower Division Core	17
Upper Division Microbiology Core Courses	19
Additional UD Major Courses Required for Microbiology	11-15
Biochemistry	
Additional UD Depth Courses in Microbiology	
Required Courses Outside of the Major	42
Mathematics	
Chemistry	
Physics	
Upper Division Writing Expectation for the Major	2-7
Total Hours	91-100

Biology/Microbiology Lower Division Core

Rule: All of the following courses are required.

Note: The lower division core should be completed before attempting most upper division major courses.

AP Biology credit may be substituted for either BIOB 160N/BIOB 161N or BIOB 170N/BIOB 171N.

BIOB 160N	Principles of Living Systems	3
BIOB 161N	Prncpls of Living Systems Lab	1
BIOB 170N	Prncpls Biological Diversity	3
BIOB 171N	Prncpls 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 Microbiology Core Courses

Rule: All of the following courses are required.

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

Minimum Required Grade: C-

Additional UD Major Courses Required for Microbiology

Minimum Required Grade: C-

Biochemistry

Select either one semester or one year of biochemistry from the following: 4-6

One Semester:		
BCH 380	Biochemistry	
One Year:		
BCH 480	Advanced Biochemistry I	
BCH 482	Advanced Biochemistry II	
Total Hours		4-6

Minimum Required Grade: C-

Additional UD Depth Courses in Microbiology

Select 10-12 credits from the following (labs must be taken if available): 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

Minimum Required Grade: C-

Required Courses Outside of the Major

Minimum Required Grade: C-

Mathematics

Rule: All of the following courses are required.

M 162	Applied Calculus	4
or M 171	Calculus I	
STAT 216	Introduction to Statistics	4
Total Hours		8

Minimum Required Grade: C-

Chemistry

Rule: All of the following courses are required.

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 222	Organic Chemistry I Lab	2
CHMY 223	Organic Chemistry II	3
CHMY 224	Organic Chemistry II Lab	2
CHMY 311	Analytical Chem-Quant Analysis	4
Total Hours		24

Minimum Required Grade: C-

Physics

Rule: All of the following courses are required.

Select one of the following physics sequences:	10	
Algebra- and Trigonometry-based:		
PHSX 205N	College Physics I	
& PHSX 206N	and College Physics I Laboratory	
PHSX 207N	College Physics II	
& PHSX 208N	and College Physics II Laboratory	
Calculus-based:		
PHSX 215N	Fund of Physics w/Calc I	
& PHSX 216N	and Physics Laboratory I w/Calc	
PHSX 217N	Fund of Physics w/Calc II	
& PHSX 218N	and Physics Laboratory II w/Calc	
Total Hours		10

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)

Note: 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.

Minimum Required Grade: C-

1/3 Advanced Writing Courses

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	Vert Design & Evolution	5
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

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

BIOH 462	Principles Medical Physiology	3
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Exception to the Modern/Classical Languages Requirement

Rule: Choose one of the following Math courses

Note: The Division of Biological Sciences has been granted an exception to the Modern/Classical Language Requirement. Either of these Calculus courses (required by the major) will satisfy this requirement.

M 162	Applied Calculus	4
or M 171	Calculus I	
Total Hours		4

Minimum Required Grade: C-

Microbiology Minor

Minor - Microbiology

College Humanities & Sciences

Degree Specific Credits: 19

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Summary

Microbiology Core Courses	16
Additional Upper Division Microbiology Requirement	3
Total Hours	19

Microbiology Core Courses

Rule: All of the following courses are required.

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

Minimum Required Grade: C-

Additional Upper Division Microbiology Requirement

Rule: Complete 3 additional upper division credits in BIOM

Minimum Required Grade: C-

3 Total Credits Required

Central and Southwest Asian Studies

Dr. Ardi Kia, Advisor

The University of Montana has emerged as a national and international leader in recognizing the significance of Central and Southwest Asia, and translating that awareness into a major academic program. The program builds on significant faculty experience and expertise in the region, and includes scholars from a variety of academic disciplines. The program has also organized intensive summer language training programs at UM, as well as summer study tours for K-12 teachers to Central Asia, and also hosts an annual conference that brings leading scholars, diplomats, analysts, and journalists to the UM campus.

The University of Montana offers an undergraduate major as well as a Minor in Central and Southwest Asian Studies. Arabic, Chinese, Persian, Russian and Turkish language instruction are also offered. Faculty exchanges have been organized with universities in China, Egypt, Georgia, Kazakhstan, Kyrgyzstan, Morocco, Russia and Tajikistan.

Undergraduate

- Central and Southwest Asian Studies B.A. (p. 195)

Undergraduate Minors

- Central and Southwest Asian Studies (p. 196)

Central and Southwest Asian Studies B.A.

Bachelor of Arts - Central & Southwest Asian Stds

College Humanities & Sciences

Degree Specific Credits: 42

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Note: Students are required to complete 12 credits of Lower-Division core courses, 9 credits of Upper-Division core courses, in addition to completing the Capstone requirement. Students also must complete the second year sequence (8-10 credits) of either Arabic OR Chinese OR Russian, for a combined total of 42-44 credits. Students are strongly recommended to take a third or fourth year of language study.

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umd.edu/academics/general-education-requirements>) of the catalog.

Summary

Lower Division Core Courses	12
Upper-Division Core Courses	9
Language Electives	18-20
Capstone Requirement	3
Total Hours	42-44

Lower Division Core Courses

Rule: Must complete all of the following courses

ANTY 141H	The Silk Road	3
ANTY 241H	Central Asian Culture and Civ	3
CSWA 262H	Islamic Civil: Classical Age	3
Total Hours		9

Minimum Required Grade: C-

Upper-Division Core Courses

Select three of the following:	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

Minimum Required Grade: C-

Language Electives

Rule: Must complete 1 of the following subcategories

18-20 Total Credits Required

Arabic**Rule:** May choose to complete the following courses

ARAB 101	Elementary Modern Standard Arabic I	5
ARAB 102	Elementary Modern Standard Arabic II	5
ARAB 201	Intermediate Modern Standard Arabic I	4
ARAB 202	Intermediate Modern Standard Arabic II	4
Total Hours		18

Minimum Required Grade: C-

Chinese**Rule:** May choose to complete 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

Minimum Required Grade: C-

Russian**Rule:** May choose to complete 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

Minimum Required Grade: C-

Capstone Requirement**Rule:** Must complete 1 of the following courses

ANTY 494	Seminar/Workshop	3
Total Hours		3

Minimum Required Grade: C-

Central and Southwest Asian Studies Minor

The Central and Southwest Asian Studies Minor is available to all students. It consists of eighteen credits. Students selecting the minor are required to successfully complete HSTR 146H and six credits in foundational Central and Southwest Asian Studies courses (200-level courses). Students must then complete nine credits of additional course work at the 300- or 400- level. No language courses are required; however, students pursuing the minor are strongly encouraged to meet the University-wide general education foreign language competency requirement by completing at least the second semester of one of the following languages (100 level or higher): Chinese, Persian, Arabic, Turkish or Russian. Participation in a study-abroad program is strongly recommended.

Minor - Central & Southwest Asian Stds**College Humanities & Sciences****Degree Specific Credits:** 18**Required Cumulative GPA:** 2.0**Catalog Year: 2017-2018**

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

Lower Division Core Courses	9
Introductory Course	
Foundational Courses	
Upper Division Core Courses	9
Total Hours	18

Lower Division Core Courses**Rule:** Complete the following subcategories of courses

9 Total Credits Required

Introductory Course**Rule:** Must complete the following course

ANTY 141H	The Silk Road	3
Total Hours		3

Minimum Required Grade: C-

Foundational Courses**Rule:** Must complete the following courses

CSWA 262H	Islamic Civil: Classical Age	3
HSTR 241H	Central Asian Cult & Civ	3
Total Hours		6

Minimum Required Grade: C-

Upper Division Core Courses

Note: If an independent study course is selected it must be taken for 3 credits.

Select three of the following:	9	
ANTY 347	Central Asia and Its Neighbors	
ANTY 442	Cities/Landscapes Central Asia	
ANTY 492	Independent Study	
CSWA 441	Seminar: Central Asia	
CSWA 457	Artistic Trad Cent & SW Asia	
HSTR 368	Iran Between Two Revolutions	
HSTR 386	Nationalism Modern Middle East	
HSTR 492	Independent Study	
Total Hours	9	

Minimum Required Grade: C

Chemistry and Biochemistry Department

Christopher P. Palmer, Chair

Chemistry is the central science that involves the study of molecules, their structures, their combinations, their interactions, and the energy changes accompanying chemical processes.

The Department offers the following degrees: B.S., B.A., M.S., M.A., and Ph.D.

Prospective students desiring further information on any program of the Department of Chemistry and Biochemistry should visit the Department of Chemistry and Biochemistry and Biochemistry Program websites.

High School Preparation: In addition to the general University admission requirements, it is strongly recommended that a student take four years of mathematics, four (or more) years of science (earth and space science, biology, chemistry, and physics), four years of a foreign language, and four years of English.

Refer to graduation requirements (p. 28) listed previously in the catalog. See index.

Undergraduate

- Chemistry B.A. (p. 197)
- Chemistry B.S. (p. 199)
- Chemistry B.S., Pharmacology Concentration (p. 204)
- Chemistry B.S., Forensic Chemistry Concentration (p. 203)
- Chemistry B.S., Environmental Chemistry Concentration (p. 201)

Undergraduate Minors

- Chemistry Minor (p. 200)

Chemistry B.A.

The courses required for the B.A. degree provide a less extensive training in chemistry than do the courses required for the American Chemical Society certified B.S. degree. This is to allow the student to supplement his or her program with courses that meet his or her specific needs. Thus this degree provides the core of traditional preparation in chemistry together with latitude for combination with an interdisciplinary field or the Teacher Preparation program. It is strongly advised that students using this degree obtain faculty advice in planning their program.

Bachelor of Arts - Chemistry

College Humanities & Sciences

Degree Specific Credits: 95

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

Lower Core Courses	45
General Chemistry	
Organic Chemistry	
Physics	
Mathematics	
Computer Science	
Upper Core Courses	16
Analytical Chemistry	
Physical Chemistry	
Advanced Electives	21
Modern Foreign Language	10
Ethics	3
Total Hours	95

Lower Core Courses

Rule: All subcategories must be completed

General Chemistry

Rule: Complete both courses

CHMY 141N	College Chemistry I	5
& CHMY 142N	and College Chemistry I Lab	
CHMY 143N	College Chemistry II	5
& CHMY 144N	and College Chemistry II Lab	
Total Hours		10

Minimum Required Grade: C-

Organic Chemistry

Rule: Complete all 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-

Physics

Rule: Complete either PHSX 205N-PHSX 206N and PHSX 207N-PHSX 208N or PHSX 215N-PHSX 216N and PHSX 217N-PHSX 218N

Select one of the following physics sequences:	10
PHSX 205N	College Physics I
& PHSX 206N	and College Physics I Laboratory
PHSX 207N	College Physics II
& PHSX 208N	and College Physics II Laboratory
OR	

PHSX 215N	Fund of Physics w/Calc I	
& PHSX 216N	and Physics Laboratory I w/Calc	
PHSX 217N	Fund of Physics w/Calc II	
& PHSX 218N	and Physics Laboratory II w/Calc	

Total Hours 10

Minimum Required Grade: C-

Mathematics

Rule: Complete all 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

Rule: Complete course

CSCI 250	Computer Mdlng/Science Majors	3
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Total Hours 3

Minimum Required Grade: C-

Upper Core Courses

Rule: All subcategories must be completed

Analytical Chemistry

Rule: 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

Rule: Complete all of the following courses

CHMY 371	Phys Chem-Qntm Chm & Spctrscopy	4
CHMY 373	Phys Chem-Kntcs & Thrmdynmcs	4

Total Hours 8

Minimum Required Grade: C-

Advanced Electives

Rule: Complete 9 credits of advanced electives in Chemistry or biochemistry approved by Chemistry adviser and 6 credits of advanced electives at the discretion of the student.

Minimum Required Grade: C-

21 Total Credits Required

Modern Foreign Language

Rule: Complete 10 credits of modern foreign language

Minimum Required Grade: Pass

10 Total Credits Required

Ethics

Rule: Complete the following course

CHMY 305E	Ethics, Literature and Writing in the Sciences	3
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Total Hours 3

Minimum Required Grade: C-

Teaching Chemistry Concentration

To sign up for this option, you need to contact the Curriculum and Instruction Department. Do not fill out a major/minor form for graduation or the major/minor/concentration section of the major change form. Approvals for this option must come from the Curriculum and Instruction Department.

Concentrations 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 concentration.

Individuals interested in teaching in K-12 schools must complete a degree in the content area they want to teach plus the teacher preparation program through the Department of Curriculum and Instruction. Individuals must complete the teaching major/teaching concentration 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 concentration and the secondary licensure program, one will be eligible for a standard Montana teaching license in this content area.

- Secondary Education Licensure Program (<http://www.coehs.umd.edu/departments/currinst/undergradprograms/seced/default.php>)
- Licensure Degree Requirements (p. 101)

Teaching Preparation Requirements

Rule: Complete both of the following

Note: The EDU 497 course number is used for multiple courses. Students should register for EDU 497 Methods: 5-12 Science.

EDU 497	Teaching and Assessing	4
ENST 472	Gen Sci: Conservation Education	3

Total Hours 7

Minimum Required Grade: C-

Teaching Licensure Requirements

Note: Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Curriculum & Instruction (p. 95) in the College of Education and Human Sciences (p. 83) for more

information. A major GPA of 2.75 is required to be eligible for student teaching.

Chemistry B.S.

(American Chemical Society Certified)

The courses required for the B.S. degree provide a solid education in chemistry for the professional chemist and in preparation for graduate work in most areas of chemistry. These requirements meet the latest certification standards of the American Chemical Society.

Bachelor of Science - Chemistry

College Humanities & Sciences

Degree Specific Credits: 94

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

Lower Core Courses	45
General Chemistry	
Organic Chemistry	
Physics	
Mathematics	
Computer Science	
Upper Division Core Courses	33
Analytical Chemistry	
Physical Chemistry	
Inorganic Chemistry	
Biochemistry	
Mathematics	
Advanced Electives	3-9
Modern Foreign Language	10
Ethics	3
Total Hours	94-100

Lower Core Courses

Rule: All courses in all subcategories listed are required

45 Total Credits Required

General Chemistry

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

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-

Physics

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-

Mathematics

M 171	Calculus I	4
M 172	Calculus II	4
M 273	Multivariable Calculus	4
Total Hours		12

Minimum Required Grade: C-

Computer Science

CSCI 250	Computer Mdlng/Science Majors	3
Total Hours		3

Upper Division Core Courses

Rule: All courses in all subcategories listed are required

33 Total Credits Required

Analytical Chemistry

CHMY 311	Analytical Chem-Quant Analysis	4
CHMY 421	Advanced Instrument Analysis	4
Total Hours		8

Minimum Required Grade: C-

Physical Chemistry

CHMY 371	Phys Chem-Qntm Chm & Spctrscopy	4
CHMY 373	Phys Chem-Kntcs & Thrmodynms	4
Total Hours		8

Minimum Required Grade: C-

Inorganic Chemistry

CHMY 401	Advanced Inorganic Chemistry	3
CHMY 402	Advanced Inorganic Chem Lab	2
CHMY 403	Descriptive Inorganic Chem	3
Total Hours		8

Minimum Required Grade: C-

Biochemistry

BCH 480	Advanced Biochemistry I	3
BCH 486	Biochemistry Research Lab	3
Total Hours		6

Minimum Required Grade: C-

Mathematics

M 311	Ordinary Differential Equations and Systems	3
Total Hours		3

Minimum Required Grade: C-

Advanced Electives**Rule:** Choose 3 to 9 credits from the listed courses.**Note:** 3 credits maximum of CHMY 492 or CHMY 499 may be applied toward degree requirements.

Other classes in chemistry, physics, geology, biochemistry, or mathematics may be used to meet the Advanced Electives requirement with approval of the Chemistry Adviser.

2 additional Advanced Electives of at least 3 credits each may be substituted for the Modern Language requirement with approval of the Chemistry Adviser.

Select 3-9 credits from the following:		3-9
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		3-9

Minimum Required Grade: C-

Modern Foreign Language**Rule:** Complete 2 semesters (10 credits) of a modern language or 2 additional advanced elective courses**Note:** 2 Advanced Elective courses worth at least 3 credits each may be substituted for the Modern Foreign Language requirement with approval from the Chemistry Adviser.

Minimum Required Grade: Pass

10 Total Credits Required

Ethics**Rule:** Complete the following course

CHMY 305E	Ethics, Literature and Writing in the Sciences	3
Total Hours		3

Minimum Required Grade: C-

**Chemistry Minor
Minor - Chemistry (Minor)****College Humanities & Sciences****Degree Specific Credits: 31****Required Cumulative GPA: 2.0****Catalog Year: 2017-2018****Summary**

Lower Core Courses	18
Upper Core Courses	7-8
Physical Chemistry Requirement	3-4
Upper Division Electives	6-8
Total Hours	34-38

Lower Core Courses**Rule:** Must complete all of the following:

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

Minimum Required Grade: C-

Upper Core Courses**Rule:** Must complete the following:

CHMY 311	Analytical Chem-Quant Analysis	4
Total Hours		4

Minimum Required Grade: C-

Physical Chemistry Requirement**Rule:** Must complete one of the following:

CHMY 360	Applied Physical Chemistry	3-4
or CHMY 373	Phys Chem-Kntcs & Thrmdynmcs	
Total Hours		3-4

Minimum Required Grade: C-

Upper Division Electives**Rule:** Must complete two of the following:

Note: If the student's major requires biochemistry, BCH 380 or BCH 480 and BCH 482 may not be used to satisfy this requirement.

Select two of the following:	6-8
BCH 380 Biochemistry	
BCH 480 Advanced Biochemistry I	
BCH 482 Advanced Biochemistry II	
CHMY 371 Phys Chem-Qntm Chm & Spctrscopy	
CHMY 401 Advanced Inorganic Chemistry	
CHMY 403 Descriptive Inorganic Chem	
CHMY 442 Aquatic Chemistry	
CHMY 465 Organic Spectroscopy	
Total Hours	6-8

Minimum Required Grade: C-

Teaching Chemistry Concentration

A teaching minor is an academic minor which may contain different course requirements designed to meet state standards. Those interested in teaching in K-12 schools must complete a teaching major in a content area plus the teacher preparation program through the Department of Curriculum and Instruction. Additional teaching areas can be added through completion of either a teaching major or a teaching minor in that content area.

- Secondary Education Licensure Program (<http://www.coehs.umt.edu/departments/currinst/undergradprograms/seced/default.php>)
- Licensure Degree Requirements (p. 101)

The term 'minor' for this teaching option refers to courses that need to be completed. To sign up for this option, you need to contact the Curriculum and Instruction Department. Do not fill out a minor form for graduation or the minor section of the major change form. Approvals for this option must come from the Curriculum and Instruction Department.

Teaching Licensure Requirements

Note: Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Curriculum & Instruction (p. 95) in the College of Education and Human Sciences (p. 83) for more information. A minor GPA of 2.75 is required to be eligible for student teaching. Individuals completing a teaching minor must also complete a teaching major in another content area.

Teaching Preparation Requirements

Rule: Must complete all of the following:

Note: The EDU 497 course number is used for multiple courses. Students should register for EDU 497 Methods: 5-12 Science.

EDU 497 Teaching and Assessing	4
ENST 472 Gen Sci: Conservation Education	3
Total Hours	7

Minimum Required Grade: C-

Environmental Chemistry

Bachelor of Science - Chemistry; Environmental Chemistry Concentration College Humanities & Sciences

Degree Specific Credits: 89

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

Lower Core Courses	54
General Chemistry	
Organic Chemistry	
Physics	
Mathematics	
Geology	
Biochemistry Biology	
Upper Division Core Courses	25-26
Analytical Chemistry	
Physical Chemistry	
Inorganic Chemistry	
Biochemistry	
Statistics	
Geology	
Advanced Electives	8
Ethics	3
Total Hours	90-91

Lower Core Courses

Rule: All courses in all subcategories listed are required

General Chemistry

CHMY 141N College Chemistry I	5
& CHMY 142N and College Chemistry I Lab	
CHMY 143N College Chemistry II	5
& CHMY 144N and College Chemistry II Lab	
Total Hours	10

Minimum Required Grade: C-

Organic Chemistry

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-

Physics

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-

Mathematics

M 171	Calculus I	4
M 172	Calculus II	4
Total Hours		8

Minimum Required Grade: C-

Geology

GEO 101N	Introduction to Physical Geology	3
GEO 102N	Introduction to Physical Geology Lab	1
Total Hours		4

Minimum Required Grade: C-

Biochemistry Biology

BCH 110	Intro Biology for Biochemists	3
BCH 111	Intro Biol for Biochemists 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**Rule:** All subcategories must be completed**Analytical Chemistry****Rule:** 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**Rule:** Choose 1 of the listed courses

CHMY 360	Applied Physical Chemistry	3-4
or CHMY 373	Phys Chem-Kntcs & Thrdynmcs	
Total Hours		3-4

Minimum Required Grade: C-

Inorganic Chemistry**Rule:** Complete the following course

CHMY 401	Advanced Inorganic Chemistry	3
Total Hours		3

Minimum Required Grade: C-

Biochemistry**Rule:** Complete the following course

BCH 480	Advanced Biochemistry I	3
Total Hours		3

Minimum Required Grade: C-

Statistics**Rule:** Complete the following courses

STAT 451	Statistical Methods I	3
STAT 457	Computer Data Analysis I	1
Total Hours		4

Minimum Required Grade: C-

Geology**Rule:** Complete the following course

GEO 327	Geochemistry	4
Total Hours		4

Minimum Required Grade: C-

Advanced Electives**Rule:** Choose at least 8 credits from the listed courses.**Note:**

- 3 credits maximum of CHMY 492.
- 3 credits maximum of BIOB 492.
- 3 credits maximum of GEO 492.
- A maximum of 5 credits of Modern Foreign Language may be applied to meet the Advanced Electives requirement.

Select at least 8 credits from the following: 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 & Thrdynmcs	
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-

Ethics

Rule: Complete the following course

CHMY 305E	Ethics, Literature and Writing in the Sciences	3
Total Hours		3

Minimum Required Grade: C-

Forensic Chemistry

Bachelor of Science - Chemistry; Forensic Chemistry Concentration

College Humanities & Sciences

Degree Specific Credits: 100

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

Lower Core Courses		52
General Chemistry		
Organic Chemistry		
Biochemistry and Biology		
Physics		
Mathematics		
Forensic Science and Criminal Justice		
Upper Division Core Courses		28-29
Analytical Chemistry		
Physical Chemistry		
Inorganic Chemistry		
Biochemistry		
Experiential Learning		
Seminar		
Statistics		
Advanced Electives		11
Expressive Art - Public Speaking		3
Social Science - Criminology		3
Ethics		3
Total Hours		100-101

Lower Core Courses

Rule: All courses in all subcategories listed are required

General Chemistry

CHMY 141N	College Chemistry I	5
& CHMY 142N	and College Chemistry I Lab	
CHMY 143N	College Chemistry II	5
& CHMY 144N	and College Chemistry II Lab	
Total Hours		10

Minimum Required Grade: C-

Organic Chemistry

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-

Biochemistry and Biology

BCH 110	Intro Biology for Biochemists	3
BCH 111	Intro Biol for Biochemists Lab	1
BIOB 260	Cellular and Molecular Biology	4
Total Hours		8

Minimum Required Grade: C-

Physics

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-

Mathematics

M 171	Calculus I	4
M 172	Calculus II	4
Total Hours		8

Minimum Required Grade: C-

Forensic Science and Criminal Justice

CJUS 125N	Fund of Forensic Science	3
SOCI 221	Criminal Justice System	3
Total Hours		6

Minimum Required Grade: C-

Upper Core Courses

Rule: All subcategories must be completed

Analytical Chemistry

Rule: 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

Rule: Choose 1 of the listed courses

CHMY 360	Applied Physical Chemistry	3-4
or CHMY 373	Phys Chem-Kntcs & Thrdynmcs	
Total Hours		3-4

Minimum Required Grade: C-

Inorganic Chemistry

Rule: Complete the following course

CHMY 401	Advanced Inorganic Chemistry	3
Total Hours		3

Minimum Required Grade: C-

Biochemistry

Rule: Complete the following courses

BCH 480	Advanced Biochemistry I	3
BCH 482	Advanced Biochemistry II	3
Total Hours		6

Minimum Required Grade: C-

Experiential Learning

Rule: Choose 1 of the listed courses for 3 credits

CHMY 488	Forensic Research	3
or CHMY 498	Internship/Cooperative Educ	
Total Hours		3

Minimum Required Grade: C-

Seminar

Rule: Complete the following course

CHMY 489	Forensic Research Seminar	1
Total Hours		1

Minimum Required Grade: C-

Statistics

Rule: Complete 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

Rule: Choose 11 credits from the listed courses. 8 of the credits must be numbered 300 or above

Select 11 credits from the following:		11
BIOB 440	Biological Electron Microscopy	
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	
PHAR 110N	Use & Abuse of Drugs	
Total Hours		11

Minimum Required Grade: C-

Expressive Art - Public Speaking

Rule: Complete the following course

COMX 111A	Intro to Public Speaking	3
Total Hours		3

Minimum Required Grade: C-

Social Science - Criminology

Rule: Complete the following course

SOCI 211S	Introduction to Criminology	3
Total Hours		3

Minimum Required Grade: C-

Ethics

Rule: Complete the following course

CHMY 305E	Ethics, Literature and Writing in the Sciences	3
Total Hours		3

Minimum Required Grade: C-

Pharmacology

Bachelor of Science - Chemistry; Pharmacology Concentration College Humanities & Sciences

Degree Specific Credits: 88

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umd.edu/academics/general-education-requirements>) of the catalog.

Summary

Lower Core Courses	45-46
General Chemistry	
Organic Chemistry	
Biochemistry and Biology	
Physics	
Mathematics	
Upper Core Courses	37-38
Analytical Chemistry	
Physical Chemistry	
Inorganic Chemistry	
Biochemistry	
Pharmacology	
Biology	
Advanced Electives	3
Ethics	3
Total Hours	88-90

Lower Core Courses

Rule: All subcategories must be completed

General Chemistry

Rule: Complete both 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

Rule: Complete all courses listed

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-

Biochemistry and Biology

Rule: Complete both courses

BCH 110	Intro Biology for Biochemists	3
BCH 111	Intro Biol for Biochemists Lab	1
BIOB 260	Cellular and Molecular Biology	4
Total Hours		8

Minimum Required Grade: C-

Physics

Select one of the following physics sequences:	10
PHSX 205N & PHSX 206N	College Physics I and College Physics I Laboratory

PHSX 207N & PHSX 208N	College Physics II and College Physics II Laboratory	
OR		
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-

Mathematics

Select one of the following:	7-8
M 162 & M 263	Applied Calculus and Applied Differential Equations
M 171 & M 172	Calculus I and Calculus II
Total Hours	7-8

Minimum Required Grade: C-

Upper Core Courses

Rule: All subcategories must be completed

Analytical Chemistry

Rule: 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

Rule: Choose 1 of the listed courses

CHMY 360 or CHMY 373	Applied Physical Chemistry Phys Chem-Kntcs & Thrmodynms	3-4
Total Hours		3-4

Minimum Required Grade: C-

Inorganic Chemistry

Rule: Complete the following course

CHMY 401	Advanced Inorganic Chemistry	3
Total Hours		3

Minimum Required Grade: C-

Biochemistry

Rule: Complete the following courses

BCH 480	Advanced Biochemistry I	3
BCH 482	Advanced Biochemistry II	3
Total Hours		6

Minimum Required Grade: C-

Pharmacology**Rule:** Complete 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
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Minimum Required Grade: C-

Biology**Rule:** Complete the following course

BIOM 400	Medical Microbiology	3
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Total Hours	3
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Minimum Required Grade: C-

Advanced Electives**Rule:** Choose 3 credits from the listed courses

Note: 3 credits maximum of CHMY 492 may be applied toward degree requirements. 3 credits maximum of BIOB 490 may be applied toward degree requirements.

Select 3 credits from the following: 3

BIOB 490	Adv Undergrad Research	3
CHMY 373	Phys Chem-Kntcs & Thrmodynms	
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 492	Independent Study	

Total Hours	3
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Minimum Required Grade: C-

Ethics**Rule:** Complete the following course

CHMY 305E	Ethics, Literature and Writing in the Sciences	3
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Total Hours	3
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Minimum Required Grade: C-

Communication Studies Department**Steve Schwarze, Chair**

Communication Studies engages in both social-scientific and humanistic approaches to the analysis, understanding and improvement of human communication. The discipline traces its roots to ancient Greek and Roman studies of the functions of public discourse in society, but in the twentieth century communication came to embrace the studies of interpersonal and small group interaction, human relations in organizations, media and society, and intercultural interaction. Although

interdisciplinary in spirit, the discipline has a core of knowledge, theory, and concepts concentrating on such things as symbols, messages, interactions, networks, audiences, and persuasive campaigns. Uniting the field is the belief that the role of communication in human experience is basic to comprehending complex situations and problems in the modern world. The discipline has roles in both the broad traditions of liberal arts education and in the development and refinement of practical skills.

The Department of Communication Studies at the University of Montana-Missoula focuses on three broad areas of study: interpersonal interaction and human relationships, organizational communication, and rhetoric and public discourse. The knowledge and skills the student may acquire in each of these areas are important to functioning effectively in one's personal life, at work, and as a citizen of the larger society in a rapidly changing world.

The program in Communication Studies helps to prepare students for such diverse professions as: public relations officer, marketing analyst, human resources or personnel manager, community mediator, political speech writer, health communication trainer, social services director, or student services coordinator. Also, undergraduate and graduate study can assist the student in pursuing advanced studies for law, the ministry, and higher education.

Undergraduate

- Communications Studies B.A., Communication & Human Relationships Concentration (p. 206)
- Communications Studies B.A., Organizational Communication Concentration (p. 208)

Undergraduate Minors

- Communication Studies (p. 208)

Communication and Human Relationships**Bachelor of Arts - Communication Studies; Comm & Human Relationships Concentration****College Humanities & Sciences****Degree Specific Credits:** 48**Required Cumulative GPA:** 2.0**Catalog Year: 2017-2018**

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 (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

Lower Division Core Courses	12
Upper Division Core Courses	6
Research	
Upper Division Writing	
Comm & Human Relationships Option	30
Major Courses	
Allied Courses	
Additional Major Electives	
Statistics	3-4
Total Hours	51-52

Lower Division Core Courses

Rule: Must complete all of the following courses:

COMX 111A	Intro to Public Speaking	3
COMX 115S	Introduction to Interpersonal Communications	3
COMX 220S	Intro to Organizational Comm	3
COMX 240H	Intro to Rhetorical Theory	3
Total Hours		12

Minimum Required Grade: C-

Upper Division Core Courses

Rule: Must complete the following subcategories

6 Total Credits Required

Research

Rule: Must complete the following course

Note: Students taking COMX 460 in the fall or spring semester will also be required to take COMX 461. Those taking COMX 460 in summer are exempt from this requirement.

COMX 460	Research Methods	3
Total Hours		3

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.

Select one of the following:	3
COMX 347	Rhetoric Nature & Environmtlsm
COMX 413	Comm & Conflict-Writing
COMX 414	Comm in Personal Relationships
COMX 421	Comm in Non-Profit Organizatns
COMX 422	Communication and Technology

COMX 424	Risk Crisis & Comm
COMX 445	Rhetorical Criticism & Theory
COMX 447	Rhetorical Conctruction of Women
COMX 449	Rhetoric of Women's Activism
Total Hours	3

Minimum Required Grade: C-

Comm & Human Relationships Option

Rule: Must complete the following subcategories

30 Total Credits Required

Major Courses

Select at least five of the following:	15
COMX 202S	Nonverbal Communication
COMX 311	Family Communication
COMX 380	Gender and Communication
COMX 412	Communication and Conflict
COMX 413	Comm & Conflict-Writing
COMX 414	Comm in Personal Relationships
COMX 415	Intercultural Communication
COMX 485	Communication and Health
Total Hours	15

Minimum Required Grade: C-

Allied Courses

Select at least four of the following:	12
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 Dis
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 275S	Gender and Society
SOCI 330	Juvenile Delinquency
SOCI 332	Sociology of the Family
SOCI 350	The Community
SOCI 382	Soc Psych and Social Structure
Total Hours	12

Minimum Required Grade: C-

Additional Major Electives

Rule: May take additional COMX courses to achieve 36 degree credits

Statistics

Select one of the following: 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 Minor

Minor - Communication Studies (Minor)

College Humanities & Sciences

Degree Specific Credits: 20

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Note: Once admitted to earn a minor, the student must complete a minimum of 20 credits in COMX courses, with at least 9 credits in courses numbered 300 and above.

Summary

Lower Division Core Courses	3
Electives	17
Total Hours	20

Lower Division Core Courses**Rule:** Must complete all of the following:

COMX 111A	Intro to Public Speaking	3
Total Hours		3

Minimum Required Grade: C-

Electives

Note: A maximum of 6 credits in COMX 312 may count toward a minor in communication studies.

Select 17 credits from the following: 17

COMX 115S	Introduction to Interpersonal Communications	
COMX 140L	Intro to Visual Rhetoric	
COMX 191	Special Topics	
COMX 192	Independent Study	
COMX 202S	Nonverbal Communication	
COMX 204X	International & Dvlpmnt Comm	
COMX 210	Communication in Small Groups	
COMX 212X	Intro to Intercultural Com	
COMX 217A	Oral Interpretation of Lit	
COMX 219S	Survey of Children's Comm	
COMX 220S	Intro to Organizational Comm	

COMX 222	Professional Communication	
COMX 240H	Intro 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 Critic	
COMX 347	Rhetoric Nature & Environmtlsm	
COMX 349	Comm Consump & 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	Comm & Conflict-Writing	
COMX 414	Comm in Personal Relationships	
COMX 415	Intercultural Communication	
COMX 421	Comm in Non-Profit Organizatns	
COMX 422	Communication and Technology	
COMX 423	Org Comm Consult & Train	
COMX 424	Risk Crisis & Comm	
COMX 425	Comm in Health Organizations	
COMX 445	Rhetorical Criticism & Theory	
COMX 447	Rhetorical Conctruction of Women	
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

Minimum Required Grade: C-

Organizational Communication

Bachelor of Arts - Communication Studies; Organizational Communication Concentration

College Humanities & Sciences

Degree Specific Credits: 48

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

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). In the Organizational Communication option,

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 398 may count toward a major in communication studies.

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

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	3-4
Total Hours	48-49

Lower Division Core Courses

Rule: Must complete all of the following courses:

COMX 111A	Intro to Public Speaking	3
COMX 115S	Introduction to Interpersonal Communications	3
COMX 220S	Intro to Organizational Comm	3
COMX 240H	Intro to Rhetorical Theory	3
Total Hours		12

Minimum Required Grade: C-

Upper Division Core Courses

Rule: Must complete the following subcategories

Minimum Required Grade: C-

6 Total Credits Required

Research

Rule: Must complete an approved statistics course prior to taking COMX 460

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.

COMX 460	Research Methods	3
Total Hours		3

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.

Select one of the following:	3
COMX 347	Rhetoric Nature & Environmtlsm
COMX 413	Comm & Conflict-Writing
COMX 414	Comm in Personal Relationships
COMX 421	Comm in Non-Profit Organizatns
COMX 422	Communication and Technology
COMX 424	Risk Crisis & Comm
COMX 445	Rhetorical Criticism & Theory
COMX 447	Rhetorical Conctruction of Women
COMX 449	Rhetoric of Women's Activism

Total Hours 3

Minimum Required Grade: C-

Organizational Communication Option

Rule: Must complete the following subcategories

27 Total Credits Required

Major Courses

Select at least five of the following:	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	Comm & Conflict-Writing
COMX 415	Intercultural Communication
COMX 421	Comm in Non-Profit Organizatns
COMX 422	Communication and Technology
COMX 423	Org Comm Consult & Train
COMX 424	Risk Crisis & Comm
COMX 425	Comm in Health Organizations

Total Hours 15

Minimum Required Grade: C-

Allied Courses

Select at least three of the following:	9
BMGT 340	Mgmt & 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 Plannig in Community Health
HTH 465	Leading Health and, Human Perform Orgs
PSCI 361	Public Administration
PSCI 462	Human Resource Management
PSCI 466	Nonprofit Adm & Pub Svc
PSCI 467	Adv Nonprofit Adm
SOCI 306	Sociology of Work
SOCI 345	Sociology of Organizations

SOCI 471	Gender and Global Development	
Total Hours		9

Minimum Required Grade: C-

Additional Major Electives

Rule: May take any COMX courses to achieve 36 degree credits

Statistics

Select one of the following:		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-

Computer Science Department

Andrew Ware, Chair

Travis Wheeler, Assistant Chair

The growing utility of computers in research and education, as well as the increased impact of computers on our modern society, strongly implies that knowledge of computers and their capabilities should be a part of the basic education of all students. The courses listed below are designed to provide the student with this knowledge and to prepare the student for a career in a field in which there is a growing need for trained personnel. The objective of the undergraduate curriculum in computer science is to develop professionally competent, broadly educated computer scientists who wish to pursue professional careers or graduate studies.

The B.S. program is accredited by the Computing Accreditation Commission of ABET (<http://www.abet.org>). For more information, access the Computer Science Department homepage (<http://hs.umn.edu/cs>) or email the chair Andrew Ware (andrew.ware@umontana.edu).

High School Preparation: In addition to general University admission requirements, pre-college preparation should include as many computer science courses as possible, and four years of high school mathematics, to include algebra, trigonometry and pre-calculus. Also recommended are physics, chemistry and biology.

Admission Requirements

Admission to computer science courses varies according to course level and other departmental standards. However, students must have completed all prerequisite courses with a grade of at least a "C-".

Lower-Division Courses

Most 100- and 200-level courses are open on a first-come, first-served basis to all students who have the prerequisites.

Upper-Division Courses

Admission to 300-level or above courses requires successful completion of the prerequisites.

Major-Minor Status

Completed change of major forms along with college transcripts must be turned in to the department when declaring computer science as a major or minor.

Undergraduate

- Computer Science B.S. (p. 212)
- Computer Science-Mathematical Sciences Combined Major (p. 214)

Undergraduate Minors

- Computer Applications (p. 211)
- Computer Science (p. 213)
- Computer Science Teaching Minor (p. 214)

Undergraduate Certificates

- Bioinformatics Professional Certificate (p. 210)
- Computer Programming Professional Certificate (p. 211)

Certificate in Bioinformatics

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 manipulate such large quantities of data.

Professional Certificate - Bioinformatics

College Humanities & Sciences

Degree Specific Credits: 12

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Summary

Required Courses	6
Elective Courses	3
Total Hours	9

Required Courses

Rule: 6 Credits

Select two of the following:		6
CSCI 135	Fund of Computer Science I	
CSCI 250	Computer Mdlng/Science Majors	
CSCI 451	Computational Biology	
Total Hours		6

Minimum Required Grade: C-

Elective Courses

Rule: Student must complete one of the following courses

Note: BIOB 488 may fulfill this requirement if not taken as part of the core.

Select one of the following:		3
BCH 480	Advanced Biochemistry I	
BIOB 486	Genomics	
BIOB 488	Programming for Biology	
CSCI 444	Data Visualization	
CSCI 448	Pattern Recognition	
Total Hours		3

Minimum Required Grade: C-

Certificate in Computer Programming Professional Certificate - Computer Programming

College Humanities & Sciences

Degree Specific Credits: 12

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Summary

Required Courses	10
Elective Courses	3-4
Total Hours	13-14

Required Courses

Rule: Student must complete the following courses

Note: Students may take either CSCI 135 or CSCI 250 to meet the requirement.

CSCI 135	Fund of Computer Science I	3
or CSCI 250	Computer Mdlng/Science Majors	
CSCI 136	Fund of Computer Science II	3
CSCI 232	Data Structures and Algorithms	4
Total Hours		10

Minimum Required Grade: C-

Elective Courses

Rule: Students must complete one of the following courses

Select one of the following:		3-4
CSCI 205	Programming Languages w/ 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

Minimum Required Grade: C-

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.

Computer Applications Minor Minor - Computer Applications (Minor)

College Humanities & Sciences

Degree Specific Credits: 21

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Note: The minor in computer applications emphasizes use of applications such as programming languages, word processors, spreadsheets, and data bases in the management and manipulation of electronic information.

Summary

Computer Science Fundamentals	3-6
Computer Science Electives	3-9
Degree Electives	6-15
Total Hours	12-30

Computer Science Fundamentals

Rule: Take 1 or both of the following courses

Select one or both of the following:		3-6
CSCI 100	Intro to Programming	
CSCI 135	Fund of Computer Science I	
Total Hours		3-6

Minimum Required Grade: C-

Computer Science Electives

Select at least 1 and no more than 3 of the following:		3-9
CAPP 171	Communicating via Computers	
CSCI 105	Computer Fluency	
CSCI 172	Intro to Computer Modeling	
CSCI 181	Web Design and Programming	
CSCI 250	Computer Mdlng/Science Majors	
Total Hours		3-9

Minimum Required Grade: C-

Degree Electives

Rule: May complete remaining degree credits from the following courses for a total of 21 degree 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.

Select 6-15 credits from the following for a total of 21 degree credits: 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 Languages w/ 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

Minimum Required Grade: C-

Computer Science B.S. Bachelor of Science - Computer Science

College Humanities & Sciences

Degree Specific Credits: 87

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umd.edu/academics/general-education-requirements>) of the catalog.

Summary

Computer Science Core Courses	33
Degree Electives	18
Communication	3
Mathematics	18
Science Core	8-10
Biology	

Chemistry	
Physics	
Science Electives	6-10
Total Hours	86-92

Computer Science Core Courses

Rule: Must complete all of the following 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.

CSCI 106	Careers in Computer Science	1
CSCI 135	Fund of Computer Science I	3
or CSCI 250	Computer Mdlng/Science Majors	
CSCI 136	Fund of Computer Science II	3
CSCI 205	Programming Languages w/ C/C++	4
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 Prgrmg Theory/Practice I	3
CSCI 427	Adv Prgrmg Theory/Practice II	3
Total Hours		33

Minimum Required Grade: C-

Degree Electives

Rule: Must complete 18 credits from the following courses

Note: A total of at most 3 of the 18 credits of CS electives may be in CSCI 398 or CSCI 498.

Select 18 credits from the following:	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
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Minimum Required Grade: C-

Communication

Rule: Must complete 1 of the following courses

COMX 111A	Intro to Public Speaking	3
or COMX 242	Argumentation	

Total Hours		3
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Minimum Required Grade: C-

Mathematics

Rule: Take the following:

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
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Minimum Required Grade: C-

Science Core

Rule: Must complete 1 of the following subcategories of science sequences

9-10 Total Credits Required

Biology

Rule: May complete the following sequence

BIOB 160N	Principles of Living Systems	3
BIOB 161N	Prncpls of Living Systems Lab	1
BIOB 170N	Prncpls Biological Diversity	3
BIOB 171N	Prncpls Biological Dvrsty Lab	2

Total Hours		9
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Minimum Required Grade: C-

Chemistry

Rule: May complete the following sequence

CHMY 141N	College Chemistry I	5
& CHMY 142N	and College Chemistry I Lab	
CHMY 143N	College Chemistry II	5
& CHMY 144N	and College Chemistry II Lab	

Total Hours		10
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Minimum Required Grade: C-

Physics

Rule: May complete the following sequence

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
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Minimum Required Grade: C-

Science Electives

Rule: Must complete 2 of the following courses

Note: The Biology, Chemistry, or Physics sequence chosen to fulfill the science core may not count toward the science electives requirement.

Laboratory courses must be taken in conjunction with their associated lecture course.

Select two of the following: 6-10

ASTR 131N	Planetary Astronomy	
& ASTR 134N	and Planetary Astronomy Lab	
ASTR 132N	Stars, Galaxies, and the Universe	
& ASTR 135N	and Stars, Galaxies, and the Universe Lab	
BIOB 160N	Principles of Living Systems	
& BIOB 161N	and Prncpls of Living Systems Lab	
BIOB 170N	Prncpls Biological Diversity	
& BIOB 171N	and Prncpls Biological Dvrsty Lab	
BIOM 250N	Microbiology for Hlth Sciences	
& BIOM 251	and Microbiology Hlth Sciences Lab	
CHMY 141N	College Chemistry I	
CHMY 143N	College Chemistry II	
FORS 201	Forest Biometrics	
GEO 101N	Introduction to Physical Geology	
& GEO 102N	and Introduction to Physical Geology Lab	
GEO 225	Earth Materials	
PHSX 215N	Fund of Physics w/Calc I	
& PHSX 216N	and Physics Laboratory I w/Calc	
PHSX 217N	Fund of Physics w/Calc II	
& PHSX 218N	and Physics Laboratory II w/Calc	
PHSX 343	Modern Physics	
& PHSX 444	and Advanced Physics Lab	

Total Hours		6-10
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Minimum Required Grade: C-

This is an advising track only and not an official program as recognized by the University of Montana (UM) or the Montana University System. This information will not appear on your UM transcript, diploma, university lists, student data system, or university publication. You do not fill out a major change for a track. After completion of this track the student will be awarded a Bachelor of Science in Computer Science.

Computer Science Minor

Minor - Computer Science (Minor)

College Humanities & Sciences

Degree Specific Credits: 21

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Note: The traditional minor in computer science emphasizes computer programming and related skills.

Summary

Computer Science Courses	18
Fundamentals	
Minor Electives	
Total Hours	18

Computer Science Courses

Rule: Must complete the following subcategories

Minimum Required Grade: C-

18 Total Credits Required

Fundamentals

Rule: Must complete all of the following courses

CSCI 135	Fund of Computer Science I	3
CSCI 136	Fund of Computer Science II	3
Total Hours		6

Minor Electives

Select 12 credits with at least 6 credits at the 300 level or above from the following: 12

CSCI 181	Web Design and Programming	
CSCI 100	Intro to Programming	
	or CSCI 250 Computer Mdlng/Science Majors	
CSCI 232	Data Structures and Algorithms	
CSCI 205	Programming Languages w/ C/C++	
CSCI 361	Computer Architecture	
	300-level or above courses	
Total Hours		12

Computer Science Teaching Minor

Minor - Computer Science Teaching

College Humanities & Sciences

Degree Specific Credits: 23

Required Cumulative GPA: 2.75

Catalog Year: 2017-2018

Summary

Core Requirements	19
Teaching Licensure Requirement	4
Total Hours	23

Core Requirements

Complete the following required 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 a teaching minor must also complete a teaching major in another content area. Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Teaching and Learning (p. 95) in the College of Education and Human Sciences for more information. A minor GPA of 2.75 is required to be eligible for student teaching.

Teaching Methods Course

Rule: Complete the following course.

Note: The EDU 497 course number is used for multiple courses. Students should register for EDU 497 Methods: Teaching and Assessing Computer Science.

EDU 497	Teaching and Assessing	4
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Minimum Required Grade: C-

Computer Science-Mathematical Sciences (Combined Major)

The purpose of the combined program is to provide a thorough background in both allied disciplines and to inculcate a deeper understanding of their goals and methods. A student must complete 60 credits in the two disciplines:

- 30 of these credits in Computer Science courses and
- 30 of these credits in Mathematical Sciences courses.

Each student plans a program in consultation with a Computer Science and a Mathematical Sciences advisor. Students planning to attend graduate school in computer science or the mathematical sciences should consult with their respective advisors.

Bachelor of Science - Computer Sci- Mathematical Sci

College Humanities & Sciences

Degree Specific Credits: 73

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

Mathematical Sciences	31
Computer Science	30
Science Requirement	9-10
Biology	
Chemistry	
Physics	
Public Speaking Requirement	3
Advanced College Writing Requirement	3
Total Hours	76-77

Mathematical Sciences

Rule: Complete the following subcategories.

31 Total Credits Required

Mathematical Sciences Core

Rule: 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

Rule: Complete 12 credits from the following courses.

Note: The combined nine credits of Computer Science Electives and twelve credits of Mathematical Sciences Electives must include at least three 3- or 4-credit courses numbered 400 or above, with at least one chosen from each department (not including M 429 and STAT 451, STAT 452).

Complete 12 credits from 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 Non-Euclidean Geometry
M 440	Numerical Analysis
M 445	Statistical, Dynamical, and Computational Modeling
M 461	Practical Big Data 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

Rule: 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 Languages w/ C/C++	4
CSCI 232	Data Structures and Algorithms	4
CSCI 332	Design/Analysis of Algorithms	3
CSCI 361	Computer Architecture	3
Total Hours		21

Minimum Required Grade: C-

Computer Science Electives

Rule: Complete 9 credits from the following courses.

Note:

1. A total of at most three of the nine credits of Computer Science Electives may be in CSCI 398 or 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).

Complete 9 credits from the following	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 Prgrmg Theory/Practice I	
CSCI 427 Adv Prgrmg 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

Rule: If you choose biology, 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

Minimum Required Grade: C-

Chemistry

Rule: If you choose chemistry, complete all of the following courses.

CHMY 141N College Chemistry I	5
& CHMY 142N and College Chemistry I Lab	
CHMY 143N College Chemistry II	5
& CHMY 144N and College Chemistry II Lab	
Total Hours	10

Minimum Required Grade: C-

Physics

Rule: 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

Rule: Complete 1 of the following courses.

COMX 111A Intro to Public Speaking	3
or COMX 242 Argumentation	
Total Hours	3

Minimum Required Grade: C-

Advanced College Writing Requirement

Rule: Complete 1 of the following courses.

Note: Any other approved Advanced College Writing course will also fulfill this requirement.

Select 3 credits from the following:	3
CSCI 315E Computers, Ethics, and Society	
CSCI 499 Senior Thesis/Capstone	
M 429 History of Mathematics	
M 499 Senior Thesis	
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

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

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)

M 461	Practical Big Data 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

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

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 Prgmng Theory/Practice I	3
CSCI 460	Operating Systems	3
CSCI Elective		3
Total Hours		23-24

East Asian Studies Undergraduate

- East Asian Studies B.A. (p. 217)

East Asian Studies B.A. Bachelor of Arts - East Asian Studies

College Humanities & Sciences

Degree Specific Credits: 44

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

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

Lower Division Core Courses

Rule: Complete the following subcategories

6 Total Credits Required

Fundamentals

Rule: Must complete the following course

Note: On occasion the Modern and Classical Languages department offers an alternative Introduction to East Asian Studies course which could fulfill this requirement. Check with the advisor.

HSTR 240	East Asian Civilizations	3
Total Hours		3

Minimum Required Grade: C-

Culture and Civilization

Rule: Must complete 1 of the following courses

CHIN 211H	Chinese Culture and Civiliz	3
	or JPNS 150H Japanese Cult & Civiliz	
Total Hours		3

Minimum Required Grade: C-

Upper Division Core Courses

Rule: Must complete the following subcategories

18 Total Credits Required

Chinese Studies

Rule: Must complete 2 courses of Chinese Studies

Japanese Studies

Rule: Must complete 2 courses of Japanese Studies

East Asian Studies

Rule: Must complete 2 courses of Japanese, Chinese, Viet Nam, pan-East Asia, or Buddhism

Note: Student may select from courses as they are available.

Language

Rule: Must complete one of the following subcategories

20 Total Credits Required

Chinese Language

Rule: May select the following language sequence

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

Minimum Required Grade: C-

Japanese Language

Rule: May select the following language sequence

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

Minimum Required Grade: C-

Economics Department

Jeff Bookwalter, Chairperson

The department considers its teaching goals to be three-fold:

1. To present students with the basic theoretical tools of economic analysis, relevant facts and institutional material, which will assist them as civic leaders.
2. To introduce students majoring in economics to the various special fields of study within economics. This training, along with extensive work in the other liberal arts and sciences, is intended to instill breadth of intellectual interest, critical habits of thought, a problem-solving attitude and facility of expression.
3. To help meet, through graduate work, the increasing demands for competent professional economists in industry, commerce, government and education.

Courses cover general economic theory, environmental economics, monetary theory, international economics, public finance, labor economics, economic development, comparative economic systems, econometrics, and industrial organization.

Students major in economics leading to a Bachelor of Arts degree. Graduate work leads to a Master of Arts degree in economics (see Graduate School catalog).

Undergraduate

- Economics B.A. (p. 218)

Undergraduate Minors

- Economics (p. 220)

Economics B.A.**Bachelor of Arts - Economics****College Humanities & Sciences**

Degree Specific Credits: 47-51

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Note: Refer to graduation requirements (p. 28) listed previously in the catalog. See index.

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

Economics - Lower-division Core	6
Economics - Upper-division Core	13

Upper-division Electives	17
Non-economics Required Courses	11-15
Total Hours	47-51

Economics - Lower-division Core

Rule: All courses are required.

ECNS 201S	Principles of Microeconomics	3
ECNS 202S	Principles of Macroeconomics	3
Total Hours		6

Minimum Required Grade: C-

Economics - Upper-division Core

Rule: All courses are required.

Note: ECNS 398 credits do not count toward the total credits requirement for the major. The Upper-division Writing Expectation must be met by successfully completing ECNS 481.

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

Minimum Required Grade: C-

Upper-division Electives

Note: ECNS 398 does NOT count toward the total required credits for the major.

Select a minimum of 17 credits from the following: 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

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.

M 115	Probability and Linear Mathematics	3
M 171 & M 172 or M 162	Calculus I and Calculus II Applied Calculus	4-8
STAT 216	Introduction to Statistics (or equivalent)	4
Total Hours		11-15

Minimum Required Grade: C-

Teaching Economics Track

Individuals interested in teaching in K-12 schools must complete a degree in the content area they want to teach plus the teacher preparation program through the Department of Curriculum and Instruction. Individuals must complete the teaching major/teaching track within that degree program, which may contain different course requirements than the academic major since the sequence of courses is designed to meet state standards. Upon completion of the degree program with the teaching track and the secondary licensure program, one will be eligible for a standard Montana teaching license in this content area.

- Secondary Education Licensure Program (<http://www.coehs.umt.edu/departments/currinst/undergradprograms/seced/default.php>)
- Licensure Degree Requirements (p. 101)

Teacher Preparation in Economics

Students who want to be licensed to teach economics at the high-school level must complete the BA degree requirements in economics. They also must complete a teaching major or minor in a second field of their choice and the professional licensure program in the College of Education. Students may also earn a teaching minor in economics. See the Department of Curriculum & Instruction (p. 95) for information about admission to the Teacher Education Program and completion of these licensure programs.

To sign up for this option, you need to contact the Curriculum and Instruction Department. Do not fill out a major/minor form for graduation or the major/minor/concentration section of the major change form. Approvals for this option must come from the Curriculum and Instruction Department.

Tracks will not appear on your UM transcript, diploma, university lists, student data system, or university publication and are used for advising purposes only. You do not fill out a major change for a track.

Note: This major does not qualify as a single field endorsement. Individuals must complete a second teaching major or minor in another content area. Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Curriculum & Instruction (p. 95) in the College of Education and Human Sciences for more

information. A major GPA of 2.75 is required to be eligible for student teaching.

Teaching Track

Rule: Must complete the following course

Note: The EDU 497 course number is used for multiple courses. Students should register for EDU 497 Methods: 5-12 Social Studies.

EDU 497	Teaching and Assessing	4
Total Hours		4

Minimum Required Grade: C-

Economics Minor Minor - Economics (Minor)

College Humanities & Sciences

Degree Specific Credits: 25

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Summary

Economics - Lower-division Core	6
Economics - Upper-division Core	6
Economics - Upper-division Electives	6
Non-economics Required Courses	7
Total Hours	25

Economics - Lower-division Core

Rule: All courses are required.

ECNS 201S	Principles of Microeconomics	3
ECNS 202S	Principles of Macroeconomics	3
Total Hours		6

Minimum Required Grade: C-

Economics - Upper-division Core

Rule: All courses are required.

Note: M 115 and M 162 should be taken before enrolling in ECNS 301.

ECNS 301	Intermediate Micro with Calc	3
ECNS 302	Intermediate Macroeconomics	3
Total Hours		6

Minimum Required Grade: C-

Economics - Upper-division Electives

Rule: Six additional credits of economics classes numbered 300 or above

Note: Students are required to complete STAT 216 (or equivalent) with a C- or better before enrolling in ECNS 403.

Select 6 credits from the following: 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

Minimum Required Grade: C-

Non-economics Required Courses

Rule: All courses are required.

Note: M 115 (or equivalent) and M 162 should be taken before enrolling in ECNS 301.

M 115	Probability and Linear Mathematics	3
M 162	Applied Calculus	4
Total Hours		7

Minimum Required Grade: C-

Teaching Economics Track

A teaching minor is an academic minor which may contain different course requirements designed to meet state standards. Those interested in teaching in K-12 schools must complete a teaching major in a content area plus the teacher preparation program through the Department of Curriculum and Instruction. Additional teaching areas can be added through completion of either a teaching major or a teaching minor in that content area.

- Secondary Education Licensure Program (<http://www.coehs.umt.edu/departments/currinst/undergradprograms/seced/default.php>)
- Licensure Degree Requirements (p. 101)

The term 'minor' for this teaching option refers to courses that need to be completed. To sign up for this option, you need to contact the Curriculum and Instruction Department. Do not fill out a minor form for graduation or the minor section of the major change form. Approvals for this option must come from the Curriculum and Instruction Department.

Teaching Licensure Requirements

Note: Individuals completing a teaching minor must also complete a teaching major in another content area. Students must be formally

admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Curriculum & Instruction (p. 95) in the College of Education and Human Sciences for more information. A minor GPA of 2.75 is required to be eligible for student teaching.

Teaching Methods Course

Rule: Complete the following course

Note: The EDU 497 course number is used for multiple courses. Students should register for EDU 497 Methods: 5-12 Social Studies.

EDU 497	Teaching and Assessing	4
Total Hours		4

Minimum Required Grade: C-

English Department

Beverly Chin, Chair, Director, English Teaching, Director, Montana Writing Project

The Department of English is among the oldest and most prestigious units at the University. As one of the campus's original departments, it offered some of the University's inaugural courses, including literature classes taught by UM's first president, Oscar J. Craig. In 1919, Rhodes Scholar H.G. Merriam inaugurated one of the first creative writing programs in the country. Now, more than a century old, this department offers a

B.A. with options in

- Literature,
- Creative Writing,
- Teaching,
- Film Studies, and
- Linguistics

Graduate degrees in

- Creative Writing (M.F.A.),
- Literature (M.A.), and
- Teaching (M.A.).

Our Composition program serves the entire University by offering the first-year composition requirement, as well as courses in advanced composition and graduate seminars in the teaching of writing. We have a relatively new minor in Irish Studies.

Admission Requirements

To be admitted to any option of the undergraduate English major, a student must satisfy the following requirements:

1. Completion of 24 credits overall with a minimum cumulative GPA of 2.5 or a GPA of 2.5 in the previous two terms.
2. Completion of at least nine credits in English, excluding WRIT (composition) courses, with a minimum GPA of 2.5 and no grade lower than a C (2.00) in those courses.

Students who intend to major in English but who have not yet met the above requirements are admitted to the program as pre-English majors.

Pre-English majors will be assigned to the English department Academic Advisor. Before a student can graduate with a major in English, she or he must meet the requirements to become an English major and declare a specific option within the program.

Undergraduate

- English B.A., Creative Writing Concentration (p. 221)
- English B.A., English Teaching Concentration (p. 229)
- English B.A., Film Studies Concentration (p. 224)
- English B.A., Linguistics Concentration (p. 225)
- English B.A., Literature Concentration (p. 227)
- English B.A., Literature and the Environment Concentration (p. 228)

Undergraduate Minors

- English (p. 222)
- Film Studies (p. 225)
- Irish Studies (p. 226)

Creative Writing

The Creative Writing program is predicated on the model of the workshop, and focuses on three areas of study: poetry, fiction, and nonfiction. Undergraduates who select the creative writing 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 Humanities & Sciences

Degree Specific Credits: 39

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umn.edu/academics/general-education-requirements>) of the catalog.

Summary

Foundation Courses	21
Upper-level CRWR Requirements	12
English elective courses	6
Modern or Classical Language major requirement	
Total Hours	39

Foundation Courses

LIT 110L	Intro to Lit	3
Select two from the following:		6
LIT 202L	The Environmental Imagination	
LIT 236L	Literary Histories	
LIT 246L	Genres, Themes, Approaches	
Select two from the following:		6
CRWR 210A	Intro Fiction Workshop	
CRWR 211A	Intro Poetry Workshop	
CRWR 212A	Intro Nonfiction Workshop	
LIT 300	Literary Criticism	3
LIT 327	Shakespeare	3
Total Hours		21

Minimum Required Grade: C

Upper-level Creative Writing Courses

Rule: Complete all categories:

Select two from the following:		6
CRWR 310	Intermediate Fiction Workshop	
CRWR 311	Intermediate Poetry Workshop	
CRWR 312A	Intern Nonfiction Workshop	
Select one from the following:		3
CRWR 320	The Art and Craft of Revision	
CRWR 322	Techniques of Modern Essay	
CRWR 391	Special Topics	
CRWR 491	Special Topics	
CRWR 425	Storytelling	
Select one from the following:		3
CRWR 410	Advanced Fiction Workshop	
CRWR 411	Advanced Poetry Workshop	
CRWR 412	Advanced Nonfiction Workshop	
Total Hours		12

Minimum Required Grade: C

Upper-level English Electives

Rule: Select two courses (6 credits) at the 300- or 400-level from offerings in LIT, IRSH, FILM, non-workshop CRWR courses or MCLL literature.

Minimum Required Grade: C-

Modern or Classical Language major requirement

Rule: Complete the 202-level proficiency in either a modern or classical language other than English

Note: Students may either take four sequential semesters (101, 102, 201, 202) of a modern or classical language or exemplify proficiency through examination (available through the Modern and Classical Languages and Literature Department).

Minimum Required Grade: C-

English Minor

Minor - English (Minor)

College Humanities & Sciences

Degree Specific Credits: 12

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Note: English minors must earn at least 18 credits within the English Department (excluding WRIT courses).

Summary

Focus courses	12
Total Hours	12

Foundational courses

Rule: Complete any two 200-level courses with LIT or CRWR prefixes

Minimum Required Grade: C-

6 Total Credits Required

Focus courses

Rule: Complete any four upper-division English elective courses (12 credits).

Note: Students must complete four upper-division English elective courses. Any 300+level courses with the prefixes LIT, ENIR, FILM, and CRWR qualify. Some of these upper-division courses carry pre-requisites, so students should select lower- and upper-division courses carefully to ensure meeting those pre-requisites.

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 412 also 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.

Minimum Required Grade: C-

12 Total Credits Required

Teaching English Track

A teaching minor is an academic minor which may contain different course requirements designed to meet state standards. Those interested in teaching in K-12 schools must complete a teaching major in a content area plus the teacher preparation program through the Department of Curriculum and Instruction. Additional teaching areas can be added through completion of either a teaching major or a teaching minor in that content area.

- Secondary Education Licensure Program (<http://www.coehs.umt.edu/departments/currinst/undergradprograms/seced/default.php>)
- Licensure Degree Requirements (p. 101)

The English Teaching program provides content knowledge, pedagogy, and professional experiences required for teaching literacy in a democratic society. Based on current research and best practices, the English Teaching program integrates the study of language, literature, and media, creating learning communities and supporting teachers as critical thinkers, creative problem solvers, and reflective practitioners. Students who successfully complete this option and the requirements from the College of Education receive both a B.A. in English teaching and a secondary teaching license (grades 5-12) in English. At the graduate level, the English Teaching program offers advanced theory and pedagogy courses, culminating in an M.A. in English (Teaching). The English Teaching Program is also the home of the Montana Writing Project, which is dedicated to improving the teaching and learning of writing at all grade levels and offers a special focus on meeting the state-mandated Indian Education for All.

Individuals interested in teaching in K-12 schools must complete a degree in the content area they want to teach plus the teacher preparation program through the Department of Curriculum and Instruction. Individuals must complete the teaching major /teaching track within that degree program which may contain different course requirements than the academic major since the sequence of courses is designed to meet state standards. Upon completion of the degree program with the teaching track and the secondary licensure program, one will be eligible for a standard Montana teaching license in this content area.

To sign up for this option, you need to contact the Curriculum and Instruction Department. Do not fill out a major/minor form for graduation or the major/minor/concentration section of the major change form. Approvals for this option must come from the Curriculum and Instruction Department.

Note: English Teaching minors must earn 36 credits within the English Department. Individuals completing a teaching minor must also complete a teaching major in another content area. A minor GPA of 2.75 is required to be eligible for student teaching.

Upper Division Requirements

Rule: Complete two courses (6 credits).

Note: ENLI 465/LING 465 and ENT 439 do not carry pre-requisites.

ENLI 465	Structure of Eng for Tchrs	3
ENT 439	Studies in Young Adult Lit	3
Total Hours		6

Minimum Required Grade: C-

English Teaching methods courses

Rule: Complete three courses (9 credits).

Note: Students must be admitted to the Teacher Education Program prior to enrolling in ENT 440, ENT 441, and ENT 442. Other EDU pre-/co-requisites also apply to ENT 440, ENT 441, and ENT 442.

ENT 440	Teaching Writing	3
ENT 441	Tchg Rdng & Literature	3
ENT 442	Tchg Oral Lang & Media Lit	3
Total Hours		9

Minimum Required Grade: C-

Upper Division Literature Electives

Rule: Complete two courses (6 credits).

Note: Please note that most of these courses carry pre-requisites.

Minimum Required Grade: C-

6 Total Credits Required

D Designation: Diversity

Rule: Complete one course (3 credits).

Select one of the following:		3
LIT 304	U.S. Writers of Color	
LIT 305	Lit by & About Native Amer	
LIT 343	African American Lit	
LIT 378L	Gay and Lesbian Studies	
Total Hours		3

Minimum Required Grade: C-

American literature focus

Rule: Complete one course (3 credits).

Select one of the following:		3
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 342	Montana Writers	
LIT 343	African American Lit	
LIT 373	Lit & Environment	
Total Hours		3

Minimum Required Grade: C-

Upper-division Writing Courses

Rule: Complete two courses (6 credits).

Note: English Teaching students may substitute FILM 320 for LIT 327.

LIT 300	Literary Criticism	3
LIT 327	Shakespeare	3
	or FILM 320 Shakespeare and Film	
Total Hours		6

Minimum Required Grade: C-

Teaching licensure requirements

Note: Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Curriculum and Instruction

(p. 95) in the College of Education and Human Sciences for more information.

Film Studies

In Film Studies, students receive a thorough introduction to the many facets of moving image culture, including a background in film history, theory, and aesthetics. In this interdisciplinary program, students are exposed to a broad array of national and international films, as well as filmic translations of well-known works of literature. Students analyze film from a variety of theoretical perspectives and become critical viewers of what is now one of the most predominant forms of cultural representation. Film Studies currently offers a minor for those students who wish to learn more in this discipline without committing fully to the degree program.

Bachelor of Arts - English; Film Studies Concentration

College Humanities & Sciences

Degree Specific Credits: 45

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Note: Upon successful completion of the Pre-English requirements, students must declare the English major and choose a degree option. English majors with the option in Film Studies must earn 45-60 of their total credits in Department of English courses.

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

Foundational courses	6
Focus courses	6
Film electives	27
Upper Division Writing Courses	6
Modern or Classical Language major requirement	4-18
Total Hours	49-63

Foundational courses

Rule: Complete course

FILM 103L	Introduction to Film	3
Total Hours		3

Minimum Required Grade: C-

Focus courses

Rule: Complete two courses (6 credits).

FILM 300	History of Film	3
FILM 447	Film Theory	3
Total Hours		6

Minimum Required Grade: C-

Film electives

Rule: Complete 9 courses (27 credits) from the following list.

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 major when the topic specifically includes film.

Select 27 credits from the following: 27

ENT 442	Tchg Oral Lang & Media Lit	
FILM 191	Special Topics	
FILM 291	Special Topics	
FILM 308	Russian Cinema and Culture	
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		27

Minimum Required Grade: C-

Upper Division Writing Courses

Rule: Complete two courses (6 credits).

Note: LIT 300 is open only to English majors who have completed the Pre-English curriculum and have declared a major option.

Note: LIT 300 is the pre-requisite for most other 300- and 400-level LIT courses, including FILM 320.

FILM 320	Shakespeare and Film	3
LIT 300	Literary Criticism	3
Total Hours		6

Minimum Required Grade: C-

Modern or Classical Language major requirement

Rule: Complete the 202-level proficiency in either a modern or classical language other than English

Note: Students may either take four sequential semesters (101, 102, 201, 202) of a modern or classical language or exemplify proficiency through examination (available through the Modern and Classical Languages and Literature Department).

Minimum Required Grade: Pass

4-18 Total Credits Required

Film Studies Minor

Minor - Film Studies (Minor)

College Humanities & Sciences

Degree Specific Credits: 27

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Note: Students minoring in Film Studies must earn 27 total credits.

Summary

Foundational courses	6
Focus courses	6
Film electives	15
Total Hours	27

Foundational courses

Rule: Complete course

FILM 103L	Introduction to Film	3
Total Hours		3

Minimum Required Grade: C-

Focus courses

Rule: Complete two courses (6 credits).

FILM 300	History of Film	3
FILM 447	Film Theory	3
Total Hours		6

Minimum Required Grade: C-

Film electives

Rule: Complete 5 courses (15 credits) from the following list.

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.

Select 15 credits from the following: 15

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 15

Minimum Required Grade: C-

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 filmic translations of well-known works of literature. Students will analyze film from a variety of theoretical perspectives and become critical viewers of what is now one of the most predominant forms of cultural representation.

General Linguistics

In conjunction with the Linguistics Program, English also offers a concentration in English Linguistics which provides a background in both literature. Students interested in Teaching English as a Second

Language, which prepares students for the particular concerns of second-language acquisition and pedagogy, may pursue the Teaching English as a Second Language Certificate Program through the Anthropology Department. Please note that the Teaching English as a Second Language (ESL) Certificate Program is not a stand-alone route to licensure. For licensure requirements, refer to the College of Education (p. 83) section in this catalog.

Bachelor of Arts - English; Linguistics Concentration

College Humanities & Sciences

Degree Specific Credits: 51

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

English Core Courses	15
Upper Division Requirements	27
Upper Division English Electives	3
Upper Division Writing Courses	6
Modern or Classical Language major requirement	
Total Hours	51

English Core Courses

Rule: Must complete the following courses:

LIT 110L	Intro to Lit	3
Choose 2 courses from the following:		
LIT 202L	The Environmental Imagination	3
LIT 236L	Literary Histories	
LIT 246L	Genres, Themes, Approaches	
LIT 300	Literary Criticism	3
LIT 327	Shakespeare	3
Total Hours		12

Minimum Required Grade: C

Upper Division Requirements

Rule: Complete nine courses (27 credits).

Note: ENLI 465/LING 465 and LING 470 do not carry pre-requisites. LING 470 is a pre-requisite for all other LING courses above 470 (e.g. 471+).

Select 27 credits from the following:	27
ENLI 465	Structure of Eng for Tchrs
LING 470	Linguistic Analysis
LING 471	Phonetics and Phonology

LING 472	Generative Syntax	
LING 474	Historical Linguistics	
LING 475	Linguistic Field Methods	
LING 477	Bilingualism	
LING 478	Learner Language	
LING 489	Morphology	

Total Hours 27

Minimum Required Grade: C-

Upper Division English Electives

Rule: Complete one course

Note: Please note that these courses carry pre-requisites.

LIT 349L	Medieval Lit	3
or LIT 350L	Chaucer	

Total Hours 3

Minimum Required Grade: C-

Upper Division Writing Courses

Rule: Complete two courses (6 credits).

Note: LIT 300 is open only to English majors who have completed the Pre-English curriculum and have declared a major option.

Note: LIT 300 is the pre-requisite for most other 300- and 400-level LIT courses, including LIT 327. FILM 320 substitutes for LIT 327.

LING 473	Language and Culture	3
LIT 327	Shakespeare	3
or FILM 320	Shakespeare and Film	

Total Hours 6

Minimum Required Grade: C-

Modern or Classical Language major requirement

Rule: Complete the 202-level proficiency in either a modern or classical language other than English

Note: Students may either take four sequential semesters (101, 102, 201, 202) of a modern or classical language or exemplify proficiency through examination (available through the Modern and Classical Languages and Literature Department).

Minimum Required Grade: C-

Irish Studies Minor

Minor - Irish Studies (Minor)

College Humanities & Sciences

Degree Specific Credits: 18

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Note: Irish Studies students must earn at least 18 credits. These credits will include both the required coursework and electives.

Summary

Foundational courses	9
Irish Literature Course	3
Minor electives	6
Total Hours	18

Foundational courses

Rule: Complete 3 courses (9 credits).

IRSH 101	Elementary Irish	4
IRSH 102	Elementary Irish II	4
Select one of the following:		3
IRSH 249	The Irish	
IRSH 345L	Literature in the Irish Lang	
IRSH 360	Irish/N Irish Literature	
Total Hours		11

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).

Select 3 credits from the following:		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

Minimum Required Grade: C-

Minor electives

Note: Irish Theater is offered intermittently through the School of Fine Arts as THTR 391.

Students who wish to continue with Irish language through the 202 level may do so, but only Irish language 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.

Select 6 credits from the following:		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

Minimum Required Grade: C-

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.

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 (e.g. Literature and the Environment) and literatures of diversity (e.g. Native American Literature). M.A. students select graduate seminars in American, British, and 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 Humanities & Sciences

Degree Specific Credits: 36

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Note: English majors with the concentration in Literature must earn 42-60 of their total credits in Department of English courses.

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

English Core Courses	15
Upper Division Requirements 300-400	12
A Designation: Medieval through early modern British Literature	
B Designation: Enlightenment through Romantic British Literature or pre-1865 American Literature	

C Designation: 400-level theory	
D Designation: Diversity	
Literature Seminar Capstone	3
Upper Division Writing Courses	6
Modern or Classical Language major requirement	
Total Hours	36

English Core Courses

Rule: Must complete the following courses:

LIT 110L	Intro to Lit	3
Choose 2 courses from the following:		6
LIT 202L	The Environmental Imagination	
LIT 236L	Literary Histories	
LIT 246L	Genres, Themes, Approaches	
LIT 300	Literary Criticism	3
LIT 327	Shakespeare	3
Total Hours		15

Minimum Required Grade: C

Upper-Division Courses

Select 3 courses from the following:		9
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	
Total Hours		9

Minimum Required Grade: C

Select one of the following:		3
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		3

Minimum Required Grade: C-

Literature Seminar Capstone

Must complete the following Course:

LIT 494	Seminar: Lit Capstone	3
Total Hours		3

Minimum Required Grade: C-

Upper Division English Electives

Rule: Select any two upper-division courses (6 credits) from the course prefixes CRWR, IRSH, FILM, LING, LIT, or WRIT. All courses must be 300- or 400-level.

Minimum Required Grade: C-

6 Total Credits Required

Modern or Classical Language major requirement

Rule: Complete the 202-level proficiency in either a modern or classical language other than English

Note: Students may either take four sequential semesters (101, 102, 201, 202) of a modern or classical language or exemplify proficiency through examination (available through the Modern and Classical Languages and Literature Department).

Minimum Required Grade: C-

Literature and the Environment Bachelor of Arts - English; Literature & The Environment Concentration

College Humanities & Sciences

Degree Specific Credits: 36

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umd.edu/academics/general-education-requirements>) of the catalog.

Summary

English Core Courses	24
Upper-Division English Elective Courses	6
A Designation: Medieval through early modern British Literature	
B Designation: Enlightenment through Romantic British Literature or pre-1865 American Literature	

C Designation: 400-level theory	
D Designation: Diversity	
Senior Seminar	3
Foreign Language	
An approved complementary course from a discipline other than English	3
Total Hours	36

English Core Courses

Rule: Must complete 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

Minimum Required Grade: C-

Upper-Division English Elective Courses

Rule: Must complete three 300- or 400-level English courses

Select two courses from the following: 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-

Senior Seminar

Rule: Must complete the following courses:

LIT 494	Seminar: Lit Capstone	3
Total Hours		3

Minimum Required Grade: C-

Foreign Language

Note: Foreign Language: Two years of a SINGLE modern or classical language or the equivalent (200+ level) score on a competency exam is required.

An approved complementary course from a discipline other than English

Minimum Required Grade: C-

3 Total Credits Required

Teaching English

The English Teaching program provides content knowledge, pedagogy, and professional experiences required for teaching literacy in a democratic society. Based on current research and best practices, the English Teaching program integrates the study of language, literature, and media, creating learning communities and supporting teachers as critical thinkers, creative problem solvers, and reflective practitioners. Students who successfully complete this concentration and the requirements from the College of Education receive both a B.A. in English teaching and a secondary teaching license (grades 5-12) in English. At the graduate level, the English Teaching program offers advanced theory and pedagogy courses, culminating in an M.A. in teaching. The English Teaching Program is also the home of the Montana Writing Project, which is dedicated to improving the teaching and learning of writing at all grade levels and offers a special focus on meeting the state-mandated Indian Education for All.

Individuals interested in teaching in K-12 schools must complete a degree in the content area they want to teach plus the teacher preparation program through the Department of Teaching and Learning. Individuals must complete the teaching major/teaching track within that degree program, which may contain different course requirements than the academic major since the sequence of courses is designed to meet state standards. Upon completion of the degree program with the teaching track and the secondary licensure program, one will be eligible for a standard Montana teaching license in this content area.

- Secondary Education Licensure Program (<http://www.coehs.umt.edu/departments/currinst/undergradprograms/seced/default.php>)
- Licensure Degree Requirements (p. 101)

Bachelor of Arts - English; English Teaching Concentration

College Humanities & Sciences

Degree Specific Credits: 42

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

English Core Courses	15
Upper Division Lit Courses	6
English Teaching courses	15
English electives	6
Total Hours	42

English Core Courses

LIT 110L	Intro to Lit	3
	or CRWR 211A Intro Poetry Workshop	
Select two of the following:		6
LIT 202L	The Environmental Imagination	
LIT 236L	Literary Histories	
LIT 246L	Genres, Themes, Approaches	
LIT 300	Literary Criticism	3
LIT 327	Shakespeare	3
Total Hours		15

Minimum Required Grade: C

Upper Division Requirements

Select two from the following:		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-

English Teaching methods 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.

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
LING 465	Structure & History of English	3
Total Hours		15

Minimum Required Grade: C-

English electives

Rule: Complete two courses (6 credits) in ENT, LIT, CRWR, FILM, IRSH, or WRIT (above WRIT 101 College Writing I)

Minimum Required Grade: C-

6 Total Credits Required

Teaching Licensure Requirements

Note: Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Teaching and Learning (p. 95) in the College of Education and Human Sciences for more information.

Environmental Studies

Len Broberg, Interim 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. (p. 231)

Undergraduate Minors

- Environmental Studies (p. 233)

Undergraduate Certificates

- Certificate in Community Agriculture (p. 233)

Environmental Studies B.A. Bachelor of Arts - Environmental Studies

College Humanities & Sciences

Degree Specific Credits: 54

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Note: To obtain depth of knowledge in an area of focus, students are expected to select a minor or double major from another campus discipline, or work with an EVST advisor on selecting or designing an EVST focus area.

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

Lower Division Core Courses	24
Environmental Science and Environmental Studies	
Chemistry	
Math	
Biology	
Quantitative Skills - Statistics	
Upper Division Core	15

Natural Science - Ecology	
Policy	
Humanities	
Social Science	
Approved Community Service/Internship Experience	
Elective Environmental Studies Courses	9
Foreign Language Requirement	10
Additional Requirements	6
Native American Studies	
Additional Science Course	
Total Hours	64

Lower Division Core Courses

Rule: Complete the following subcategories of courses

24 Total Credits Required

Environmental Science and Environmental Studies

Rule: Complete all courses

ENSC 105N	Environmental Science	3
ENST 201	Environmental Info Resources	3
ENST 225	Community & Environment	3
ENST 230H	Nature and Society	3
Total Hours		12

Minimum Required Grade: C-

Chemistry

Rule: Complete the following course

CHMY 121N	Introduction to General Chemistry	3
Total Hours		3

Minimum Required Grade: C-

Math

Rule: Complete the following course

M 115	Probability and Linear Mathematics	3
Total Hours		3

Minimum Required Grade: C-

Biology

Rule: Complete 1 of the following

Select 3 credits from the following:	3	
BIOB 101N	Discover Biology	
BIOB 160N	Principles of Living Systems	
BIOB 161N	Prncpls of Living Systems Lab	
BIOB 170N	Prncpls Biological Diversity	
Total Hours	3	

Minimum Required Grade: C-

Quantitative Skills - Statistics

Select 3 credits from the following:	3	
FORS 201	Forest Biometrics	

PSYX 222	Psychological Statistics	
SOCI 202	Social Statistics	
STAT 216	Introduction to Statistics	
Total Hours		3

Minimum Required Grade: C-

Upper Division Core

Rule: Complete the following subcategories of courses

15 Total Credits Required

Natural Science - Ecology

Select one of the following: 3

BIOE 370	General Ecology	
ENSC 360	Applied Ecology	
FORS 330	Forest Ecology	
Total Hours		3

Minimum Required Grade: C-

Policy

Rule: Complete one of the following:

ENST 367	Environmental Politics & Policies	3
or ENST 382	Environmental Law	
Total Hours		3

Minimum Required Grade: C-

Humanities

Select one of the following: 3

ENST 335L	The Environmental Vision	
ENST 410	TEK of Native Peoples	
ENST 430	Culture & Agriculture	
Total Hours		3

Minimum Required Grade: C-

Social Science

Select 3 credits from the following: 3

ENST 310	Environment Montana: A to Z	
ENST 487	Globalization, Justice & Environment	
ENST 489S	Environmental Justice Issues & Solutions	
Total Hours		3

Minimum Required Grade: C-

Approved Community Service/Internship Experience

Select 3 credits from the following: 3

ENSC 398	Cooperative Education/Intern	
ENST 396	Supervised Internship (PEAS)	
ENST 398	Cooperative Education/Intern	
Total Hours		3

Minimum Required Grade: C-

Elective Environmental Studies Courses

Select 9 credits from the following: 9

COMX 347	Rhetoric Nature & Environmtlsm	
COMX 349	Comm Consump & 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 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, Agriculture, Environment	
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

Minimum Required Grade: C-

Additional Requirements

Rule: Complete the following subcategories of courses

6 Total Credits Required

Native American Studies

Select one of the following: 3

ENST 410	TEK of Native Peoples	
NASX 303E	Ecol Persp in Nat Amer Trad	
NASX 304E	Native American Beliefs/Philos	
Total Hours		3

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.

Select one of the following: 3

BIOB 170N	Princpls Biological Diversity	
BIOO 335	Rocky Mountain Flora	

ERTH 303N	Weather and Climate	
NRSM 210N	Soils, Water and Climate	
NRSM 265	Elements of Ecological Restora	
NRSM 385	Watershed Hydrology	
Total Hours		3

Minimum Required Grade: C-

Environmental Studies Minor Minor - Environmental Studies (Minor)

College Humanities & Sciences

Degree Specific Credits: 25

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Summary

Lower Core Courses	9
Upper Division Electives	16
Environmental Studies	
Ecology	
Total Hours	25

Lower Core Courses

Rule: Must complete all of the following:

ENSC 105N	Environmental Science	3
ENST 225	Community & Environment	3
ENST 230H	Nature and Society	3
Total Hours		9

Upper Division Electives

Rule: Complete the following subcategories of courses

16 Total Credits Required

Environmental Studies

Select 13 credits from the following: 13

COMX 347	Rhetoric Nature & Environmtlsm	
COMX 349	Comm Consump & 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, Agriculture, Environment	
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	
GPHY 421	Sustainable Cities	
PHL 323	Ethics of Climate Change	
Total Hours		13

Minimum Required Grade: C-

Ecology

Select one of the following: 3

BIOE 172N	Introductory Ecology	
BIOE 370	General Ecology	
ENSC 360	Applied Ecology	
FORS 330	Forest Ecology	
Total Hours		3

Minimum Required Grade: C-

Community Agriculture Certificate

General Description

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.

CERTIFICATE IN COMMUNITY AGRICULTURE

College of Humanities & Sciences

Degree Specifics: 21

Required Cumulative GPA: 3.0

Catalog Year: 2017-2018

Summary

Required Courses	6
Elective Courses	6
Total Hours	12

Required Courses

Take these courses

ENST 396	Supervised Internship (PEAS)	6
ENST 398	Cooperative Education/Intern	6
ENST 430	Culture & Agriculture	3
ENST 480	Food, Agriculture, Environment	3
Total Hours		18

Elective

Rule: Students must complete a 3-credit course on social organization, social factors influencing human behavior, and/or the practice of facilitating and leading groups (e.g. SOCI 350; S W 300). Advisor approval of course selection is required.

Geography Department

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

- Mountain Studies,
- 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, Master of Arts, and Master of Sciences degrees in geography. For a B.A. in geography, an option in community and environmental planning is available. For a B.S. in geography an option in physical geography is available. Also offered are a minor in geography and a teaching major and minor in geography. Several interdisciplinary minors are available to students:

- a minor in mountain studies,
- a minor in climate change and
- a minor in international development studies.

See the Graduate School website (<http://www.umt.edu/grad/default.php>) 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 (<http://www.cfc.umt.edu/giscertificate>).

Undergraduate

- Geography B.A. (p. 237)
- Geography B.A., Community & Environmental Planning Concentration (p. 234)
- Geography B.S. (p. 239)
- Geography B.S., Physical Geography Concentration (p. 243)

Undergraduate Minors

- Geography (p. 241)
- Mountain Studies (p. 243)

Undergraduate Certificates

- Geographic Information Systems Certificate of Art (p. 236)

Community and Environmental Planning

Bachelor of Arts - Geography; Community & Environmental Planning Concentration

College Humanities & Sciences

Degree Specific Credits: 43

Required Cumulative GPA: 2.5

Note: An internship is strongly recommended.

Catalog Year: 2017-2018

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

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
Community and Environmental Planning Concentration	13-20
Community and Environmental Planning Core	
Community and Environmental Planning Methods	
Community and Environmental Planning Electives	

General Ed Mathematics	3
Total Hours	49-56

Introduction to Geography

Rule: Must 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

Select at least one of the following: 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

Minimum Required Grade: C-

Methods

Rule: Must complete all of the following courses

Minimum Required Grade: C-

10 Total Credits Required

Geographic Methods

GPHY 284	Intro to GIS and Cartography	3
GPHY 385	Field Techniques	3
Total Hours		6

Minimum Required Grade: C-

Mathematics/Statistics

STAT 216		4
Total Hours		4

Minimum Required Grade: C-

Upper Division Systematic Geography

Rule: Must complete the following subcategories of courses

9 Total Credits Required

Physical Geography

Select at least one of the following: 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

Note: GPHY 323S and GPHY 421 count simultaneously toward Upper Division Systematic Geography and CEP electives.

Select at least one of the following: 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

Note: GPHY 335 and GPHY 432 count simultaneously toward Upper Division Systematic Geography and CEP electives.

Select at least one of the following: 3

GPHY 335	Water Policy	
GPHY 338	Mountains and Society	
GPHY 432	Human Role Environmental Change	
GPHY 433	Cultural Ecology	
Total Hours		3

Minimum Required Grade: C-

Capstone

Rule: Seniors must complete the following course

Note: Seniors must enroll in GPHY 400 in fall, attend GPHY 500 in fall, and complete course requirements in spring.

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

Select one of the following: 3

GPHY 335	Water Policy	
GPHY 433	Cultural Ecology	

GPHY 499	senior thesis / capstone	
Total Hours		3
Minimum Required Grade: C-		

Community and Environmental Planning Concentration

Rule: Must complete the following subcategories

13-20 Total Credits Required

Community and Environmental Planning Core

Rule: Must complete both courses

GPHY 465	Planning Principles & Processes	3
GPHY 466	Environmental Planning	3
Total Hours		6

Minimum Required Grade: C-

Community and Environmental Planning Methods

Rule: Must complete at least 1 of the following course/lab combinations

Note: GPHY 468 must be taken together with GPHY 469. GPHY 486 must be taken together with GPHY 489.

Select one of the following:		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

Minimum Required Grade: C-

Community and Environmental Planning Electives

Rule: Must complete at least 3 courses from the following courses:

Note: If not previously taken to fulfill CEP Methods, the following courses can be selected as electives:

1. GPHY 468/GPHY 469 - 4 cr
2. 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 and GPHY 432 can be used to satisfy upper division requirements in 'Human Environment Interaction.'

Select at least three of the following:		9
GPHY 323S	Economic Geography of Rural Areas	
GPHY 335	Water Policy	
GPHY 421	Sustainable Cities	
GPHY 432	Human Role Environmental Change	
Total Hours		9

Minimum Required Grade: C-

General Ed Mathematics

Note: Students are encouraged to take M 115. Students who successfully complete M 122, M 171, or M 172 also meet the degree specific Gen Ed Mathematics requirement. Gen Ed credits do not count towards degree credits.

Select 3 credits from the following:		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-

Geographic Information Systems Certificate

Certificate in GIS Sciences and Technologies

The Certificate in GIS Sciences and Technologies, jointly offered by the departments of Geography and Forest Management, is aimed at present or future professionals or scientists who require skills in GIS technologies. The purpose of this program is to provide undergraduate students or individuals possessing an undergraduate degree with the training, knowledge, and understanding necessary to acquire, process, analyze, and properly display digital geographic data.

Special Requirements for the Certificate

To earn a certificate in GIS Sciences and Technologies, students must either complete or have completed an undergraduate degree and complete a minimum of 20 semester credit hours of course work, including 9 to 11 required credits and 9 to 11 elective credits as described below. Students must achieve at least an overall grade point average of 3.0 for courses within the program in order to earn a certificate. The certificate will be awarded upon the successful completion of all of the requirements of the certificate and the undergraduate degree.

Certificate of Art - Geographic Information Systems

College Humanities & Sciences

Degree Specific Credits: 20

Required Cumulative GPA: 3.0

Catalog Year: 2017-2018

Summary

Required GIS Core Courses	9-11
Introduction to GIS	
Photogrammetry/Remote Sensing	
Additional Required Courses	3-4
Advanced Elective Courses	
Raster GIS, Remote Sensing, and Image Analysis	

Vector GIS and Networks	
Data Management and Programming	
GIS Applications	
Total Hours	12-15

Required GIS Core Courses

Rule: Must complete 1 from each of the following subcategories

Minimum Required Grade: C-

9-11 Total Credits Required

Introduction to GIS

FORS 250	Intro to GIS for Forest Mgt	3
or GPHY 284	Intro to GIS and Cartography	
Total Hours		3

Minimum Required Grade: C-

Photogrammetry/Remote Sensing

Select one of the following: 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

Select one of the following: 3-4		
FORS 350	Forestry Apps of GIS	
GPHY 488 & GPHY 489	Applications of GIS and Cartography/GIS Laboratory	
Total Hours		3-4

Minimum Required Grade: C-

Advanced Elective Courses

Rule: Must complete 9-11 credits of the following subcategories

Minimum Required Grade: C-

9-11 Total Credits Required

Raster GIS, Remote Sensing, and Image Analysis

Select one or both of the following: 4-8		
FORS 551	Digital Image Processing	
GPHY 587 & GPHY 589	Image Analysis & Modeling and Cartography/GIS Laboratory	
Total Hours		4-8

Minimum Required Grade: C-

Vector GIS and Networks

Select 3-11 credits from the following: 3-11		
GPHY 486 & GPHY 489	Transport, Planning & GIS and Cartography/GIS Laboratory	
GPHY 580	Seminar GIS & Cartography	

GPHY 588 & GPHY 589	Spatial Analysis and Modeling and Cartography/GIS Laboratory	
Total Hours		3-11

Minimum Required Grade: C-

Data Management and Programming

Select 3-10 credits from the following: 3-10		
CSCI 250	Computer Mdlng/Science Majors	
FORS 505	Sampling Methods	
GPHY 468 & GPHY 469	Community & Regional Analysis and Planning & Analysis Laboratory	
Total Hours		3-10

Minimum Required Grade: C-

GIS Applications

Select 3-11 credits from the following: 3-11		
ANTY 452	GIS in Archaeology	
GPHY 385	Field Techniques	
GPHY 481	Advanced Cartographic Design	
GPHY 482 & GPHY 489	Spatial Analysis & GIS and Cartography/GIS Laboratory	
GPHY 564	Planning Design	
WILD 562	Wildlife Habitat Modeling	
Total Hours		3-11

Minimum Required Grade: C-

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 take a wide range of electives in geography (minimum 11, maximum 35 elective credits). Electives may be chosen from the fields of regional geography, geographic methods and techniques, or systematic geography (physical geography, human-environment interaction, or geography and society).

Bachelor of Arts - Geography

College Humanities & Sciences

Degree Specific Credits: 36

Required Cumulative GPA: 2.5

Catalog Year: 2017-2018

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umd.edu/academics/general-education-requirements>) of the catalog.

Summary

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	10
Capstone	1
Upper Division Writing	3
General Ed Statistics	3-10
Total Hours	42-49

Introduction to Geography

Rule: Must 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

Select at least one of the following: 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

Rule: Must 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: Must complete the following subcategories of courses

Minimum Required Grade: C-

9 Total Credits Required

Physical Geography

Select at least one of the following: 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

Select at least one of the following: 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

Select at least one of the following: 3

GPHY 335	Water Policy	
GPHY 338	Mountains and Society	
GPHY 432	Human Role Environmental Change	
GPHY 433	Cultural Ecology	

Total Hours 3

Minimum Required Grade: C-

Degree Electives

Rule: Must complete 10 credits of GPHY electives to fulfill the 36 degree credit total

Note: Students must fulfill the degree credit total of 36 credits plus the university requirement for 39 upper division credits.

Minimum Required Grade: C-

10 Total Credits Required

Capstone

Rule: Seniors must complete the following course

Note: Seniors must enroll in GPHY 400 in fall, attend GPHY 500 in fall, and complete course requirements in spring.

GPHY 400	Geography Capstone	1
Total Hours		1

Minimum Required Grade: C-

Upper Division Writing

Rule: Must complete 1 of the following courses

Note: GPHY 335 or GPHY 433 will also count toward the upper division core requirements GPHY 499 will also count toward upper division elective credits.

Select one of the following: 3

GPHY 335	Water Policy	
GPHY 433	Cultural Ecology	

GPHY 499	senior thesis / capstone	
Total Hours		3

Minimum Required Grade: C-

General Ed Modern and Classical Language

Rule: Must complete either 1 year of a foreign language or STAT 216

Note: Gen Ed credits do not count towards degree credits.

Minimum Required Grade: C-

3-10 Total Credits Required

Teaching Geography Track

Individuals interested in teaching in K-12 schools must complete a degree in the content area they want to teach plus the teacher preparation program through the Department of Curriculum and Instruction.

Individuals must complete the teaching major/teaching track within that degree program, which may contain different course requirements than the academic major since the sequence of courses is designed to meet state standards. Upon completion of the degree program with the teaching track and the secondary licensure program, one will be eligible for a standard Montana teaching license in this content area.

- Secondary Education Licensure Program (<http://www.coehs.umt.edu/departments/currinst/undergradprograms/seced/default.php>)
- Licensure Degree Requirements (p. 101)

Students who want to be licensed to teach geography at the middle and high school level must complete the B.A. degree requirements in geography (general geography, no option required). They also must complete a teaching major or minor in a second field of their choice and the professional licensure program in the College of Education. Students may also earn a teaching minor in geography. See the Department of Curriculum & Instruction (p. 95) for information about admission to the Teacher Education Program and completion of the licensure program.

To sign up for this option, you need to contact the Curriculum and Instruction Department. Do not fill out a major/minor form for graduation or the major/minor/concentration section of the major change form. Approvals for this option must come from the Curriculum and Instruction Department.

Tracks will not appear on your UM transcript, diploma, university lists, student data system, or university publication and are used for advising purposes only. You do not fill out a major change for a track.

Teaching Licensure Requirements

Note: Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Curriculum & Instruction (p. 95) in the College of Education and Human Sciences for more information. A major GPA of 2.75 is required to be eligible for student teaching. This major does not qualify as a single field endorsement. Individuals must complete a second teaching major or minor in another content area.

Teaching Track

Rule: Must complete the following course

Note: The EDU 497 course number is used for multiple courses. Students should register for EDU 497 Methods: 5-12 Social Studies.

EDU 497	Teaching and Assessing	4
Total Hours		4

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., B100 105N, B10E 172N).

Bachelor of Science - Geography

College Humanities & Sciences

Degree Specific Credits: 36

Required Cumulative GPA: 2.5

Catalog Year: 2017-2018

Note: Depending on the courses selected, the degree requirements vary from 36 to 39 credits.

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

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	
Capstone	1
Upper Division Writing	3
Science Electives	6-10
Biology	
Chemistry	
College Chemistry	
College Physics	
Physics with Calculus	
Statistics Course	3-7
Math Fundamentals	

Advanced Math

Total Hours	38-46
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Introduction to Geography**Rule:** Must 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

Select at least one of the following: 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**Rule:** Must 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:** Must complete the following subcategories of courses

Minimum Required Grade: C-

9 Total Credits Required

Physical Geography

Select at least one of the following: 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

Select at least one of the following: 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

Select at least one of the following: 3

GPHY 335	Water Policy	
GPHY 338	Mountains and Society	
GPHY 432	Human Role Environmental Change	
GPHY 433	Cultural Ecology	
Total Hours		3

Minimum Required Grade: C-

Degree Electives**Rule:** 36 Geography credits are required for the major. May require additional Geography elective credits to fulfill the major.**Capstone****Rule:** Seniors must complete the following course**Note:** Seniors must enroll in GPHY 400 in fall, attend GPHY 500 in fall, and complete course requirements in spring.

GPHY 400	Geography Capstone	1
Total Hours		1

Minimum Required Grade: C-

Upper Division Writing**Rule:** Must complete 1 of the following courses**Note:**

- GPHY 335 will also count toward the upper division core requirements
- GPHY 499 will also count toward upper division elective credits.

Other science-based writing courses (e.g. GEO 320, GEO 499, BIOO 470, BIOO 475) may be approved by the advisor.

GPHY 335	Water Policy	3
	or GPHY 499	senior thesis / capstone
Total Hours		3

Minimum Required Grade: C-

Science Electives**Rule:** Must complete 1 of the following science categories

Note: Science sequence must be approved by advisor as appropriate to individual student's goals. Different science sequences may be approved by the advisor.

6-10 Total Credits Required

Biology

Rule: May complete the following courses

BIOE 172N	Introductory Ecology	3
BIOO 105N	Introduction to Botany	3
Total Hours		6

Minimum Required Grade: C-

Chemistry

Rule: May complete the following courses

CHMY 121N	Introduction to General Chemistry	3
CHMY 123	Introduction to Organic and Biochemistry	3
Total Hours		6

Minimum Required Grade: C-

College Chemistry

Rule: May complete the following courses

CHMY 141N	College Chemistry I	4
CHMY 143N	College Chemistry II	4
Total Hours		8

Minimum Required Grade: C-

College Physics

Rule: May complete the following courses

PHSX 205N	College Physics I	4
PHSX 206N	College Physics I Laboratory	1
PHSX 207N	College Physics II	4
PHSX 208N	College Physics II Laboratory	1
Total Hours		10

Minimum Required Grade: C-

Physics with Calculus

Rule: May complete 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-

Statistics Courses

Rule: Must complete 1 of the following subcategories

Note: GenEd credits do not count towards degree credits.

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.

3-7 Total Credits Required

Math Fundamentals

Rule: May complete all of the following courses

M 115	Probability and Linear Mathematics	3
STAT 216	Introduction to Statistics	4
Total Hours		7

Minimum Required Grade: C-

Advanced Math

Rule: May complete 1 of the following courses

Note: M 171 is recommended.

Select one of the following:		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 Minor

Minor - Geography (Minor)

College Humanities & Sciences

Degree Specific Credits: 19

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Summary

Introduction to Geography	7
Regional Core	3
Geographic Methods	3
Upper Division Systematic Geography	6
Total Hours	19

Introduction to Geography

Rule: Must 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 Core

Select at least one of the following: 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

Rule: Must complete 1 of the following courses

GPHY 284	Intro to GIS and Cartography	3
or GPHY 385	Field Techniques	

Total Hours 3

Minimum Required Grade: C-

Upper Division Systematic Geography

Rule: Must complete at least 1 course from 2 subcategories:

- 'Physical Geography',
- 'Geography and Society', and
- 'Human-Environment Interaction'

6 Total Credits Required

Physical Geography

Select one of the following: 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

Select one of the following: 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

Select one of the following: 3

GPHY 335	Water Policy	
GPHY 338	Mountains and Society	
GPHY 432	Human Role Environmental Change	
GPHY 433	Cultural Ecology	

Total Hours 3

Minimum Required Grade: C-

Teaching Geography Track

A teaching minor is an academic minor which may contain different course requirements designed to meet state standards. Those interested in teaching in K-12 schools must complete a teaching major in a content area plus the teacher preparation program through the Department of Curriculum and Instruction. Additional teaching areas can be added through completion of either a teaching major or a teaching minor in that content area.

- Secondary Education Licensure Program (<http://www.coehs.umd.edu/departments/currinst/undergradprograms/seced/default.php>)
- Licensure Degree Requirements (p. 101)

The term 'minor' for this teaching option refers to courses that need to be completed. To sign up for this option, you need to contact the Curriculum and Instruction Department. Do not fill out a minor form for graduation or the minor section of the major change form. Approvals for this option must come from the Curriculum and Instruction Department.

Teaching Licensure Requirements

Note: Individuals completing a teaching minor must also complete a teaching major in another content area. Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Curriculum & Instruction (p. 95) in the College of Education and Human Sciences for more information. A minor GPA of 2.75 is required to be eligible for student teaching.

Note: Individuals completing a teaching minor must also complete a teaching major in another content area. Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Curriculum & Instruction (p. 95) in the College of Education and Human Sciences for more information. A minor GPA of 2.75 is required to be eligible for student teaching.

Teaching Methods Course

Rule: Complete the following course.

Note: The EDU 497 course number is used for multiple courses. Students should register for EDU 497 Methods: 5-12 Social Studies.

EDU 497	Teaching and Assessing	4
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Total Hours 4

Minimum Required Grade: C-

Mountain Studies Minor

Mountain Studies is an interdisciplinary field of study focusing on the physical and human dimensions of mountain environments. Coursework in the minor emphasizes physical geography and mountain-society interactions, including a critical analysis of the processes of change and influence shaping local and regional mountain environments today. The minor in Mountain Studies takes advantage of existing faculty expertise and an array of courses to provide students with a science-based curriculum and global perspective. Students pursuing the minor in mountain studies will develop knowledge and skills appropriate for graduate study and for working with government and non-government agencies and groups.

Minor - Mountain Studies (Minor)

College Humanities & Sciences

Degree Specific Credits: 18

Required Cumulative GPA: 2.5

Catalog Year: 2017-2018

Note: In addition to completing the requirements for a major in any discipline, students electing the minor in Mountain Studies must have a GPA of 3.0 in the major and complete a minimum of 18 additional credits in this minor.

Summary

Upper Division Core	6
Region-Specific Mountain Studies	6
General Mountain Studies	6
Total Hours	18

Upper Division Core

Rule: Must complete all of the following courses

GPHY 314	Global Mountain Environments	3
GPHY 338	Mountains and Society	3
Total Hours		6

Minimum Required Grade: C-

Region-Specific Mountain Studies

Note: Two sections of NRSM 391 may be taken to fulfill this requirements, each for 3 credits:

1. Community and Conservation in the Northern Rockies
2. Ecological Restoration in Greater Yellowstone

Select 6 credits from the following: 6

BIOE 342	Field Ecology	
BIOE 416	Alpine Ecology	
BIOO 101N	Survey MT Wildlife & Habitats	
BIOO 335	Rocky Mountain Flora	
GPHY 144	Glacier National Park in Winter	
GPHY 344	Crown of the Continent	

GPHY 391	Special Topics	
GPHY 438	Mountain Field Study	
GPHY 444	High Asia	
NRSM 352	Mountain Environment and Development	
NRSM 391	Special Topics (may take two sections for 6 credits)	
PTRM 353	Tourism, Livelihoods and Sustainability in Mountains	
PTRM 418	Winter Wilderness Field Studies	
Total Hours		6

Minimum Required Grade: C-

General Mountain Studies

Note: One section of NRSM 311 fulfills this requirement: Conservation Biology in the Northern Rockies

Select 6 credits from the following: 6

BIOE 451	Landscape Ecology	
ERTH 303N	Weather and Climate	
FORS 330	Forest Ecology	
GEO 391	Special Topics	
GEO 433	Global Tectonics	
GEO 488	Snow, Ice and Climate	
GPHY 311N	Biogeography	
NASX 351	Traditional Eco Knowledge	
NRSM 311	Field Stds ecol/Human Commun	
NRSM 385	Watershed Hydrology	
PTRM 482	Wilderness & Protctd Area Mgt	
Total Hours		6

Minimum Required Grade: C-

Physical Geography

In addition to satisfying the general requirements for a B.S. degree in geography, a student pursuing the option in physical geography must complete additional requirements, including EARTH 303N and GPHY 317 though substitutions which broaden the student's curriculum may be approved by their advisor. Also, students must complete an additional appropriate math course above the 150 level to complement the one used to fulfill their symbolic systems requirements (the second semester of Calculus is recommended), and the two-course sequence in science used to fulfill the B.S. requirement MUST be one of the following:

CHMY 121N & CHMY 123	Introduction to General Chemistry and Introduction to Organic and Biochemistry	6
CHMY 141N & CHMY 143N	College Chemistry I and College Chemistry II	8
PHSX 205N & PHSX 207N	College Physics I and College Physics II	8
PHSX 215N & PHSX 217N	Fund of Physics w/Calc I and Fund of Physics w/Calc II	8
BIOO 105N	Introduction to Botany	3
BIOE 172N	Introductory Ecology	3

Bachelor of Science - Geography; Physical Geography Concentration

College Humanities & Sciences

Degree Specific Credits: 47

Required Cumulative GPA: 2.5

Catalog Year: 2017-2018

Note: Depending on the courses selected the degree requirements vary from 47 to 56 credits.

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

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
Physical Geography Concentration Science Electives	6-10
Biology	
Chemistry	
College Chemistry	
College Physics	
Physics with Calculus	
Physical Geography Option Core	6-9
Advanced Math	3-4
General Ed Math Fundamentals	3-4
Total Hours	47-56

Introduction to Geography

Rule: Must 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

Select at least one of the following:		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

Rule: Must 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: Must complete the following subcategories of courses

Minimum Required Grade: C-

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).

Select at least one of the following:		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

Select at least one of the following:		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

Select at least one of the following:		3
GPHY 335	Water Policy	
GPHY 338	Mountains and Society	
GPHY 432	Human Role Environmental Change	

GPHY 433	Cultural Ecology	
Total Hours		3

Minimum Required Grade: C-

Capstone

Rule: Seniors must complete the following course

Note: Seniors must enroll in GPHY 400 in fall, attend GPHY 500 in fall, and complete course requirements in spring.

GPHY 400	Geography Capstone	1
Total Hours		1

Minimum Required Grade: C-

Upper Division Writing

Rule: Must complete 1 of the following courses

Note: GPHY 335 will also count toward the upper division core requirements. GPHY 499 will also count toward upper division elective credits.

Other science-based writing courses (e.g. GEO 320, GEO 499, BIOC 470, BIOC 475) may be approved by the advisor.

GPHY 335	Water Policy	3
or GPHY 499	senior thesis / capstone	
Total Hours		3

Minimum Required Grade: C-

Physical Geography Option Science Electives

Rule: Must complete 1 of the following science categories

6-10 Total Credits Required

Biology

Rule: May complete the following courses

BIOE 172N	Introductory Ecology	3
BIOC 105N	Introduction to Botany	3
Total Hours		6

Minimum Required Grade: C-

Chemistry

Rule: May complete the following courses

CHMY 121N	Introduction to General Chemistry	3
CHMY 123	Introduction to Organic and Biochemistry	3
Total Hours		6

Minimum Required Grade: C-

College Chemistry

Rule: May complete the following courses

CHMY 141N & CHMY 142N	College Chemistry I and College Chemistry I Lab	5
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CHMY 143N & CHMY 144N	College Chemistry II and College Chemistry II Lab	5
Total Hours		10

Minimum Required Grade: C-

College Physics

Rule: May complete the following courses

PHSX 205N	College Physics I	4
PHSX 206N	College Physics I Laboratory	1
PHSX 207N	College Physics II	4
PHSX 208N	College Physics II Laboratory	1
Total Hours		10

Minimum Required Grade: C-

Physics with Calculus

Rule: May complete 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-

Physical Geography Concentration Core

Rule: Must complete all of the following courses

Note: One course can be used to satisfy the Upper Division Systematic Geography – Physical Geography. Substitutions which broaden the student's curriculum may be approved by their advisor.

ERTH 303N	Weather and Climate	3
GPHY 311N	Biogeography	3
GPHY 317	Geomorphology	3
Total Hours		9

Minimum Required Grade: C-

Advanced Math

Rule: Must complete 1 additional math or statistics course in addition to the one chosen for Math Fundamentals. For instance, if M 171 has been taken, M 172 is recommended.

Minimum Required Grade: C-

3-4 Total Credits Required

Statistics Course (Math Fundamentals)

Note: Gen Ed credits do not count towards degree credits.

Select one of the following:		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-

Geosciences Department

James R. Staub, Chair

Human impact on Earth systems and reliance on Earth's resources will increase as human population and economic production grows. These impacts are creating "global grand challenges": complex, globally important problems that require an interdisciplinary approach. The most pressing grand challenges over the next decade will be resource scarcity/depletion (especially water and petroleum), adaption to and mitigation of climate change and natural hazards, and environmental stewardship of highly stressed physical and biological Earth systems. As University of Montana Geoscientists, we address these challenges in our research and teaching. We develop the knowledge to find and extract mineral and water resources, solve problems caused by using those resources and develop models of the past, present and future Earth. Faculty, staff, graduate students, and undergraduate students are helping Montana and the World develop a sustainable future.

Our Vision:

We will build and teach a fundamental understanding of Earth processes to benefit humankind and sustain Earth systems.

Our Goals:

1. Conduct geoscience research, including obtaining extramural funding to perform essential and transformative research.
2. Disseminate research findings by publishing in peer-reviewed journals and presenting at national and international scientific conferences.
3. Teach students how to learn from known sources of information and create new knowledge from their own research.
4. Engage all graduate students and selected undergraduates in research and publication.
5. Produce graduates competent in their disciplines who can perform well in field, laboratory and computational settings, and who are prepared to serve as high-quality professionals in geoscience and related fields.
6. Provide opportunities for students to work and learn in other countries through international research and learning opportunities.
7. Educate the general student population about the nature of science and basic scientific principles through the study of Earth and its natural systems.
8. Engage the public with important geoscience issues through outreach and community education.

UM Geosciences in the National Context

With B.S., M.S. and Ph.D. degrees, UM Geosciences is one of 120 Ph.D. granting Geoscience departments in the United States. U.S. News & World Report ranks the UM Geosciences program with Universities like Florida State, Michigan Tech, University of Georgia, University of Pennsylvania, and University of South Carolina. We are ranked above schools like University of Idaho, University of Missouri, UNLV, and Notre Dame.

Employment

Geoscientists completing our program are employed by private industry, federal, state, and local governmental agencies, environmental consulting firms, non-profit organizations, and by schools needing Earth Science teachers. Jobs in geosciences are available at the B.S., M.S. and Ph.D. levels. The M.S. degree is considered the main working professional degree. The Ph.D. degree is required for positions at universities and with organizations specializing in research. However, there are ample opportunities for geoscience employment with the B.S. degree. Our graduates have a wide range of educational and employment opportunities. Over the last decade, 95% of our graduate program alumni are employed in Geosciences:

- 13% work for government,
- 23% for industry,
- 31% for consultancies and
- 2% for non-governmental organizations,
- 10% are teaching, and
- 17% went on for a Ph.D.

UM Geosciences graduates have exceptional placement rates.

Undergraduate Degree Requirements

We offer three Bachelor of Science degrees:

- Geosciences B.S.,
- International Field Geosciences Joint B.S. with University of Cork (Ireland), and
- International Field Geosciences Dual B.S. with Potsdam University (Germany).

We also offer an option in Earth Science Education.

The Upper-division Writing Expectation must be met for all degree options by successfully completing an upper-division writing course from the approved list in the Academic Policies and Procedures (p. 7) section of this catalog or by completing GEO 499.

Undergraduate

- Geosciences B.S. (p. 248)
- Geosciences B.S., Earth Science Education Concentration (p. 246)
- International Field Geosciences Dual B.S. (p. 250)
- International Field Geosciences Joint B.S. (p. 252)

Undergraduate Minors

- Geosciences (p. 250)

Earth Science Education

Individuals interested in teaching in K-12 schools must complete a degree in the content area they want to teach plus the teacher preparation program through the Department of Teaching and Learning. Individuals must complete the teaching major/teaching track within that degree program, which may contain different course requirements than the academic major since the sequence of courses is designed to meet state standards. Upon completion of the degree program with the teaching track and the secondary licensure program, one will be eligible for a standard Montana teaching license in this content area.

- Secondary Education Licensure Program (<http://www.coehs.umt.edu/departments/currinst/undergradprograms/seced/default.php>)
- Licensure Degree Requirements (p. 101)

Bachelor of Science - Geosciences; Earth Science Education Option

College Humanities & Sciences

Degree Specific Credits: 70

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

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 (p. 95) in the College of Education and Human Sciences for more information. A major GPA of 2.75 is required to be eligible for student teaching. This major does not qualify as a single field endorsement. Individuals must complete a second teaching major or minor in another content area.

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

Lower Division Core	17
Geosciences Core	
Environmental Geoscience Course	
Upper Division Geosciences	17
Physics	10
Chemistry	7
Math	8
Astronomy	3
Teaching Methods Course	4
Languages	4
Total Hours	70

Lower Division Core

Rule: Must complete all of the following courses

Minimum Required Grade: C-

17 Total Credits Required

Geosciences Core

Rule: Must 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

Rule: Must complete one of the following.

GEO 105N	Oceanography	3
Total Hours		3

Minimum Required Grade: C-

Upper Division Geosciences

Minimum Required Grade: C-

17 Total Credits Required

Required Upper Division Geoscience

Rule: Complete all of the following.

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

Rule: Complete one additional GEO course at the 300- or 400-level

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.

Physics

Rule: Must complete 1 of the following sequences

10 Total Credits Required

Physics

Rule: May complete the following sequence

PHSX 205N	College Physics I	4
PHSX 206N	College Physics I Laboratory	1
PHSX 207N	College Physics II	4
PHSX 208N	College Physics II Laboratory	1
Total Hours		10

Minimum Required Grade: C-

Physics with Calculus

Rule: May complete the following sequence

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-

Chemistry

Rule: Must complete the following courses

CHMY 121N	Introduction to General Chemistry	3
CHMY 123	Introduction to Organic and Biochemistry	3
CHMY 485	Laboratory Safety	1
Total Hours		7

Minimum Required Grade: C-

Math

Rule: Must complete one math and one statistics course

M 162	Applied Calculus	4
or M 171	Calculus I	
STAT 216	Introduction to Statistics	4
Total Hours		8

Minimum Required Grade: C-

Astronomy

Rule: Must complete the following course

ASTR 131N	Planetary Astronomy	3
Total Hours		3

Minimum Required Grade: C-

Teaching Methods Course

Rule: Must complete the following course.

Note: The EDU 497 course number is used for multiple courses. Students should register for EDU 497 Methods: 5-12 Science.

EDU 497	Teaching and Assessing	4
Total Hours		4

Minimum Required Grade: C-

Languages

Rule: Must complete 1 of the following courses

Note: Students graduating in Geosciences may substitute one of these courses in place of the Modern and Classical Language requirement.

M 162	Applied Calculus	4
or M 171	Calculus I	
Total Hours		4

Minimum Required Grade: C-

Geosciences B.S.

Bachelor of Science - Geosciences

College Humanities & Sciences

Degree Specific Credits: 62

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

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 (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

Lower Division Core	8
Degree Electives	24
Cognate Sciences	30
Physics	
Chemistry	
Math	
Computer Science	
Upper Division Writing	3-10
Languages	4
<hr/>	
Total Hours	69-76

Lower Division Core

Rule: Must complete all of the courses in one of two options

Note: Completion of either option fulfills the Lower Division Core requirements.

Option 1

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

Minimum Required Grade: C-

Option 2

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

Minimum Required Grade: C-

Degree Electives

Rule: Must complete 24 credits from the following list of courses

Select 24 credits from the following:	24
GEO 225	Earth Materials
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 420	Hydrogeology
GEO 421	Hydrology
GEO 433	Global Tectonics
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

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.

Note: 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

Rule: Must complete 1 of the following sequences

Select one of the following sequences:	10
Option 1:	
PHSX 205N	College Physics I
PHSX 206N	College Physics I Laboratory
PHSX 207N	College Physics II
PHSX 208N	College Physics II Laboratory
Option 2 with Calculus:	
PHSX 215N	Fund of Physics w/Calc I
PHSX 216N	Physics Laboratory I w/Calc
PHSX 217N	Fund of Physics w/Calc II
PHSX 218N	Physics Laboratory II w/Calc

Minimum Required Grade: C-

Chemistry

Rule: Must complete the following courses

CHMY 141N	College Chemistry I	5
& CHMY 142N	and College Chemistry I Lab	
CHMY 143N	College Chemistry II	5
& CHMY 144N	and College Chemistry II Lab	
Total Hours		10

Minimum Required Grade: C-

Math

Rule: Must complete 1 of the following subcategories

7-8 Total Credits Required

Math Option 1	7
M 162	Applied Calculus
M 263	Applied Differential Equations (Applied Differential Equations)
Math Option 2	8
M 171	Calculus I
M 172	Calculus II

Minimum Required Grade: C-

Computer Science

Rule: Must complete 1 course in Computer Science (Programming or Modeling)

Note: These courses are recommended to complete the Computer Science requirement. Credit may be received for only 1 of these 4 courses for the 30 credit minimum cognate science requirement.

Select one of the following:	3-4
CSCI 172	Intro to Computer Modeling
CSCI 250	Computer Mdlng/Science Majors
GPHY 284	Intro to GIS and Cartography
STAT 216	Introduction to Statistics
Total Hours	3-4

Minimum Required Grade: C-

Upper Division Writing

Rule: Must complete 1 upper division writing course

Note: These courses are recommended to complete the upper division writing requirement in Geosciences but students may also select from the university-approved list of upper division writing courses to fulfill this requirement.

GEO 320	Global Water	3-10
or GEO 499	Senior Thesis /Capstone	
Total Hours		3-10

Minimum Required Grade: C-

Languages

Rule: Must complete 1 of the following courses

Note: Students graduating in Geosciences may substitute one of these courses in place of the Modern and Classical Language requirement.

M 162	Applied Calculus	4
or M 171	Calculus I	
Total Hours		4

Minimum Required Grade: C-

Geosciences Minor

Minor - Geosciences (Minor)

College Humanities & Sciences

Degree Specific Credits: 18

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Summary

Lower Division Core Courses	8
Degree Electives	10
Total Hours	18

Lower Division Core Courses

Rule: Must complete all of the courses in one of two options

Note: Completion of either option fulfills the Lower Division Core requirement.

Note: Completion of all the courses in one option is recommended, but alternative sequences may be approved by a Geosciences advisor.

Option 1

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

Minimum Required Grade: C-

Option 2

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

Minimum Required Grade: C-

Degree Electives

Rule: Must complete an additional 10 credits in Geosciences courses numbered 200 and above

Minimum Required Grade: C-

10 Total Credits Required

International Field Geosciences Dual Bachelor of Science - International Field Geos Dual

College Humanities & Sciences

Degree Specific Credits: 100

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

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 Potsdam University. 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 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 (<http://catalog.umd.edu/academics/general-education-requirements>) of the catalog.

Summary

Lower Division Core	12
Upper Division Core	8
Degree Electives	17
Physics	10
Chemistry	8-10
Math	7-8
Computer Science	3-4
Upper Division Writing	4
Languages	8
Overseas Coursework	27-30
Total Hours	104-111

Lower Division Core

Rule: Must 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-

Upper Division Core**Rule:** Must complete all of the following courses

GEO 315	Structural Geology	4
GEO 318	Climate System Dynamics	4
Total Hours		8

Minimum Required Grade: C-

Degree Electives

Select 17 credits from the following: 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

Minimum Required Grade: C-

Physics**Rule:** Must complete 1 of the following sequences

10 Total Credits Required

Select one of the following sequences: 10

Option 1:		
PHSX 205N	College Physics I	
PHSX 206N	College Physics I Laboratory	
PHSX 207N	College Physics II	
PHSX 208N	College Physics II Laboratory	
Option 2 with Calculus:		
PHSX 215N	Fund of Physics w/Calc I	
PHSX 216N	Physics Laboratory I w/Calc	
PHSX 217N	Fund of Physics w/Calc II	
PHSX 218N	Physics Laboratory II w/Calc	
Total Hours		10

Minimum Required Grade: C-

Chemistry**Rule:** Must complete 1 of the following subcategories

8-10 Total Credits Required

Chemistry Option 1		8
CHMY 121N	Introduction to General Chemistry	

CHMY 123 Introduction to Organic and Biochemistry
& CHMY 124 and Introduction to Organic and Biochemistry Lab

Chemistry Option 2		10
CHMY 141N	College Chemistry I	
& CHMY 142N	and College Chemistry I Lab	
CHMY 143N	College Chemistry II	
& CHMY 144N	and College Chemistry II Lab	

Minimum Required Grade: C-

Math**Rule:** Must complete 1 of the following subcategories

7-8 Total Credits Required

Math Option 1		7
M 162	Applied Calculus	
M 263	Applied Differential Equations (Applied Differential Equations)	
Math Option 2		8
M 171	Calculus I	
M 172	Calculus II	

Minimum Required Grade: C-

Computer Science

Select one of the following: 3-4

CSCI 250	Computer Mdlng/Science Majors	
GPHY 284	Intro to GIS and Cartography	
STAT 216	Introduction to Statistics	
Total Hours		3-4

Minimum Required Grade: C-

Upper Division Writing**Rule:** Must complete the following course

Note: This course is recommended to complete the upper division writing requirement in Geosciences but students may also select from the university-approved list of upper division writing courses to fulfill this requirement.

GEO 320	Global Water	4
Total Hours		4

Minimum Required Grade: C-

Languages

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).

GRMN 101	Elementary German I	4
GRMN 102	Elementary German II	4
Total Hours		8

Minimum Required Grade: C-

Overseas Coursework

Rule: Must complete the following courses and field work at Potsdam University

Note: In addition to Geosciences coursework completed at UM students must complete the following:

- Selection of one field course run by Potsdam University listed below
 - BP 15 (Field Course - France)
 - BW01 (Field Course - Norway)
 - BW02 (field Course - Alps)
- Any 4 of the following courses offered by Potsdam University
 - Regional Geology
 - Paleoclimate @ Quaternary Geology
 - Analysis of Geologic Maps
 - Analytic Geochemistry
 - Natural Hazards
 - Tectonophysics & Rheology
 - Seismology
 - Seismics
 - Geoelectrics
 - Sedimentary Systems & Stratigraphic Geomorphology
 - Tectonics and Geodynamics
- 2 additional cognate science courses to be taken at Potsdam University

Minimum Required Grade: C-

27-30 Total Credits Required

International Field Geosciences Joint Bachelor of Science - International Field Geos Joint

College Humanities & Sciences

Degree Specific Credits: 108

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

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 (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

Lower Division Core	12
Upper Division Core	12
Degree Electives	15
Physics	10
Chemistry	8-10
Math	7-8
Computer Science	3-4
Upper Division Writing	4
Languages	8
German	
Irish	
Overseas Coursework	33-36
Total Hours	112-119

Lower Division Core

Rule: Must 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-

Upper Division Core

Rule: Must complete all of the following subcategories

Minimum Required Grade: C-

12 Total Credits Required

Subcategory 1

Rule: Must complete all of the following courses

GEO 315	Structural Geology	4
GEO 318	Climate System Dynamics	4
Total Hours		8

Minimum Required Grade: C-

Subcategory 2

Rule: Must complete 1 of the following courses

GEO 309	Sedimentation/Stratigraphy	4
or GEO 443	Principles of Sedimentary Petrology	
Total Hours		4

Minimum Required Grade: C-

Degree Electives

Select 15 credits from the following: 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

Minimum Required Grade: C-

Physics

10 Total Credits Required

Select one of the following sequences: 10

Option 1:

PHSX 205N	College Physics I
PHSX 206N	College Physics I Laboratory
PHSX 207N	College Physics II
PHSX 208N	College Physics II Laboratory

Option 2 with Calculus:

PHSX 215N	Fund of Physics w/Calc I
PHSX 216N	Physics Laboratory I w/Calc
PHSX 217N	Fund of Physics w/Calc II
PHSX 218N	Physics Laboratory II w/Calc

Total Hours 10

Minimum Required Grade: C-

Chemistry

Rule: Must complete 1 of the following subcategories

8-10 Total Credits Required

Chemistry Option 1 8

CHMY 121N	Introduction to General Chemistry
CHMY 123 & CHMY 124	Introduction to Organic and Biochemistry and Introduction to Organic and Biochemistry Lab

Chemistry Option 2 10

CHMY 141N & CHMY 142N	College Chemistry I and College Chemistry I Lab
CHMY 143N & CHMY 144N	College Chemistry II and College Chemistry II Lab

Minimum Required Grade: C-

Math

Rule: Must complete 1 of the following subcategories

7-8 Total Credits Required

Math Option 1 7

M 162	Applied Calculus
M 263	Applied Differential Equations (Applied Differential Equations)

Math Option 2 8

M 171	Calculus I
M 172	Calculus II

Minimum Required Grade: C-

Computer Science

Select one of the following: 3-4

CSCI 250	Computer Mdlng/Science Majors
GPHY 284	Intro to GIS and Cartography
STAT 216	Introduction to Statistics

Total Hours 3-4

Minimum Required Grade: C-

Upper Division Writing

Rule: Must complete the following course

Note: This course is recommended to complete the upper division writing requirement in Geosciences but students may also select from the university-approved list of upper division writing courses to fulfill this requirement.

GEO 320 Global Water 4

Total Hours 4

Minimum Required Grade: C-

Languages

Rule: Must complete 1 of the following subcategories (the "test out provision" applies as administered by the Department of Modern and Classical Languages and Literatures).

6-10 Total Credits Required

German

Rule: May complete the following language sequence

GRMN 101 Elementary German I 4

GRMN 102 Elementary German II 4

Total Hours 8

Minimum Required Grade: C-

Irish

Rule: May complete the following language sequence

IRSH 101	Elementary Irish	4
IRSH 102	Elementary Irish II	4
Total Hours		8

Minimum Required Grade: C-

Overseas Coursework

Rule: Must complete the following courses and field work at University College of Cork and Potsdam University

Note: In addition to Geosciences coursework completed at UM students must complete the following:

- 1 formal field course module run by University College Cork, selected from
 - 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, students must complete any 9 of the following courses in consultation with their 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
- 1 formal upper-level Geosciences course at Potsdam University. Recommended are courses that focus on computer-based visualization or geoscience data using GIS or other visualization platforms

Minimum Required Grade: C-

33-36 Total Credits Required

Global Humanities and Religions

Ruth Vanita, Director

The Global Humanities and Religions Program provides an education in the international and interdisciplinary humanities and in world religions. Students are able to develop their individual interests through electives, options and minors. The Program offers its majors options in:

- Global Humanities
- Religious Studies

The Program offers two minors:

- Global Humanities
- South & South-East Asian Studies (the area comprising the Indian subcontinent and the Vietnam-Thailand-Indonesia region). This is an interdisciplinary minor, taught across several departments.

Global Humanities and Religions majors choose courses from different departments, focusing on literary, philosophical and religious works from different parts of the globe, especially Europe, the US and Asia. Global Humanities and Religions offers innovative multidisciplinary courses that incorporate the tools of such disciplines as literary studies, history, philosophy, religious studies, gender studies and art history. We aim to help students develop the ability to read with comprehension, write correctly, form logical arguments based on evidence, and gain understanding of historical, literary, philosophical and religious contexts. These are skills prized by employers. Students who graduate from the program will be prepared to enter various fields in the private and public sectors, pursue further professional or academic training, and will be better prepared to function as citizens of the world.

Majors in Global Humanities and Religions may not take any course work presented for the major for CR/NCR. Upper-level students transferring into this program should have at least a C average in all credits attempted. The upper-division writing expectation must be met by successfully completing an upper-division writing course from the approved list in the General University Requirements section of this catalog.

Undergraduate

- Global Humanities and Religions B.A. (p. 254)
- Global Humanities and Religions Minor (p. 257)
- Global Humanities and Religions B.A. Religious Studies Concentration (p. 257)

Global Humanities and Religions B.A.

Bachelor of Arts - Global Humanities and Religions; Global Humanities Concentration

College Humanities & Sciences

Degree Specific Credits: 42

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Note: Advising closely with the Humanities Advisor and your assigned Global Humanities and Religions advisor is imperative. Substitutions can occur in this program of study but only when approved and documented by the Director.

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umd.edu/academics/general-education-requirements>) of the catalog.

Summary

General Humanities Lower Division Core	18-20
Humanities	
Literary Studies - European or American Literature	
Historical Studies - European or American History	
Asian Studies	
Religious Studies	
Humanities Upper Division Requirements	24
History	
Philosophy or Political Theory	
Women's and Gender Studies, Native American Studies, or African-American Studies	
Religious Studies	
Liberal Studies	
Senior Liberal Studies Capstone Seminar	
Modern and Classical Language Requirement	
Total Hours	42-44

Global Humanities Lower Division Core

Rule: 21 credits

Minimum Required Grade: C-

21 Total Credits Required

Humanities

Rule: Take all three of the following courses. (6-8 credits).

Note: Prerequisite or co-requisite: WRIT 101 or equivalent.

These courses are recommended to be taken early in the curriculum as they are foundational. They can be taken in any order.

General Education fulfillment through the lower-division core: All three courses fulfill the "Literary and Artistic Studies" requirement; GH 151L and GH 152L also fulfill the "designated writing course" requirement and GH 161H fulfills the "Historical and Cultural Studies" requirement.

GH 151L	Introduction to Western Humanities Antiquity	3
GH 152L	Introduction to the Humanities Medieval to Modern	3
Total Hours		6

Minimum Required Grade: C-

Literary Studies - Any LIT or MCLL literature content course, or any lower-division course with an L designation

Rule: Take one approved course that is at least 3 credits.

Minimum Required Grade: C-

Historical Studies - Any course in the History department or any course with an H designation

Note: Please consult with an advisor in Liberal Studies on other course possibilities for this requirement.

Minimum Required Grade: C-

Asian Studies

Select 3 credits from the following:	3
ANTY 102H	Intro to South & S. East Asia
ANTY 141H	The Silk Road
CHIN 211H	Chinese Culture and Civiliz
GH 191	Special Topics
HSTR 240	East Asian Civilizations
HSTR 262H	Islamic Civil: Classical Age
JPNS 150H	Japanese Cult & Civiliz
GH 291	Special Topics
MCLG 191	Special Topics
MCLG 291	Special Topcis
SSEA 195	Special Topics
SSEA 202X	Introduction to India
SSEA 232H	Buddhism
SSEA 234X	Hindu Religious Traditions
SSEA 295	Special Topics
Total Hours	3

Minimum Required Grade: C-

Religious Studies

Select 3 credits from the following:	3
RLST 191	Special Topics
RLST 204H	Intro to the Hebrew Bible
RLST 205L	Introduction to New Testament
RLST 225L	Christianity
RLST 232H	Buddhism
RLST 234X	Hindu Religious Traditions
RLST 238X	Japanese Religions
RLST 281E	Comparative Ethics
RLST 291	Special Topics
Total Hours	3

Minimum Required Grade: C-

Global Humanities Upper Division Requirements

Rule: 24 credits.

Note: Please work closely with the Humanities Advisor and your faculty advisor in selecting and planning coursework. Substitutions need to be approved by the Director.

Minimum Required Grade: C-

24 Total Credits Required

Six credits in History/Philosophy/Literature

Minimum Required Grade: C-

Women's and Gender Studies, Native American Studies, or African-American Studies

Select 3 credits from the following: 3

ANTY 427	Anthropology of Gender
ARTH 436	The History of Women in Art
CLAS 320	Women in Antiquity
GH 327L	Gender & Sexuality in Eng Fict
GH 328L	Gender Sexuality India
GH 329	Fathers and Daughters in Western Literary Traditions
GH 415	Same Sex Unions Literature
HSTA 342H	Afr Amer Hist to 1865
HSTA 343H	Afr Amer Hist Since 1865
HSTA 347	Voodoo, Muslim, Church: Black Religion
HSTA 370H	Wmn Amer Colonial to Civil War
HSTA 371H	Wmn Amer Civil War to Present
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 303E	Ecol Persp in Nat Amer Trad
NASX 304E	Native American Beliefs/Philos
NASX 306X	Contemp Global Iss Indg People
NASX 340	Native American Lit
NASX 351	Traditional Eco Knowledge
NASX 352	Montana's Indians/Land
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	Hist Amer Indian Affrs 10 Cent
NASX 466	Hist of Indian Affrs from 1890
NASX 475	Tribal Sovereignty
NASX 488	Stds in Native Amer Autobio
NASX 491	Special Topics
NASX 492	Independent Study
NASX 494	Seminar/Workshop
NASX 499	Senior Capstone/Thesis
RLST 370	Mysticism
WGSS 390	Undergraduate Research
WGSS 391	Special Topics
WGSS 392	Independent Study
WGSS 463	WGS Capstone
WGSS 490	Undergraduate Research
WGSS 491	Special Topics
WGSS 492	Independent Study

Total Hours 3

Minimum Required Grade: C-

Religious Studies

Select 6 credits from the following: 6

GH 316E	Talking to God: Bhagavad Gita
HSTA 347	Voodoo, Muslim, Church: Black Religion
HSTA 417	Prayer & Civil Rights
NASX 304E	Native American Beliefs/Philos
RLST 300	Theory & Method Study of Relig
RLST 310	Topics in Biblical Studies
RLST 320	Anct Judaism & Early Christnty
RLST 335	Western Religious Thought I
RLST 336	Western Religious Thought II
RLST 353	Topics in South Asia Religions
RLST 354	Topics in East Asia Religions
RLST 366	Tibetan Civilization
RLST 368	Contemporary Buddhism in S/SEAsia
RLST 369	Contemplative Traditions of Asia
RLST 370	Mysticism
RLST 376	Contemporary Religious Thought
RLST 391	Special Topics
RLST 392	Independent Study
RLST 491	Special Topics
RLST 492	Independent Study

Total Hours 6

Minimum Required Grade: C-

Global Humanities

Select 6 credits from the following: 6

GH 326	Stories East and West
GH 327L	Gender & Sexuality in Eng Fict
GH 328L	Gender Sexuality India
GH 329	Fathers and Daughters in Western Literary Traditions
GH 351L	Exploring the Humanities
GH 390	Undergraduate Research
GH 391	Special Topics
GH 392	Independent Study
GH 490	Undergradate Research
GH 491	Special Topics
GH 492	Independent Study
GH 494	Seminar/Workshop

Total Hours 6

Minimum Required Grade: C-

Senior Global Humanities Capstone Seminar

Select one of the following: 3

GH 326	Stories East and West
GH 327L	Gender & Sexuality in Eng Fict
GH 329	Fathers and Daughters in Western Literary Traditions
GH 494	Seminar/Workshop

Total Hours 3

Minimum Required Grade: C-

Global Humanities and Religions Minor

Minor - Global Humanities and Religions

College Humanities & Sciences

Degree Specific Credits: 23

Required Cumulative GPA: 2.5

Catalog Year: 2017-2018

Summary

Lower Division Core	11
Upper Division Electives I	6
Upper Division Electives II	6
Total Hours	23

Lower Division Core

Rule: Must complete all of the following courses:

GH 151L	Introduction to Western Humanities Antiquity	3
GH 152L	Introduction to the Humanities Medieval to Modern	3
GH 161H	Asian Humanities	3
Total Hours		9

Minimum Required Grade: C-

Upper Division Electives I

Select two of the following: 6

GH 326	Stories East and West	
GH 327L	Gender & Sexuality in Eng Fict	
GH 328L	Gender Sexuality India	
GH 329	Fathers and Daughters in Western Literary Traditions	
GH 316E	Talking to God: Bhagavad Gita	
Total Hours		6

Minimum Required Grade: C-

Upper Division Electives II

Select 6 credits from the following: 6

RLST 300	Theory & Method Study of Relig	
RLST 310	Topics in Biblical Studies	
RLST 320	Anct Judaism & Early Christnty	
RLST 335	Western Religious Thought I	
RLST 336	Western Religious Thought II	
RLST 353	Topics in South Asia Religions	
RLST 354	Topics in East Asia Religions	

RLST 366	Tibetan Civilization	
RLST 368	Contemporary Buddhism in S/SEAsia	
RLST 369	Contemplative Traditions of Asia	
RLST 370	Mysticism	
RLST 376	Contemporary Religious Thought	
RLST 391	Special Topics	
RLST 392	Independent Study	
RLST 491	Special Topics	
RLST 492	Independent Study	
Total Hours		6

Minimum Required Grade: C-

Religious Studies

Religious Studies Concentration, Professor Paul Dietrich, Advisor

Religion has been taught as an academic discipline at the University of Montana since 1924. Located within the Global Humanities and Religions Program, the study of religion is pursued in the University in an interdisciplinary setting that offers opportunities for exploration and discovery in many areas of the humanities, art, and sciences. Our Religious Studies courses emphasize the scholarly analysis and interpretation of the history, literature, beliefs, myths, symbols, rituals, ethical and legal codes, and communities and institutions of the world's religious traditions.

We investigate how the world's religions address enduring human questions and influence responses to daily problems, and we explore how religious traditions shape lives and societies, from the emergence of the earliest civilizations to 21st-century global conflicts. Our students engage ideas about the good life and death, suffering and happiness, war and peace, revelation and salvation, God, mysticism, and religious experience. The curriculum is designed to provide students with a broad and deep understanding of religion as a field of human activity and inquiry. Students acquire the skills necessary to investigate specific religious traditions in historical depth and to understand the forms, expressions, and roles of religion in the world today.

Bachelor of Arts - Global Humanities and Religions; Religious Studies Concentration

College Humanities & Sciences

Degree Specific Credits: 39

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

Religious Studies Lower-Division Requirements	20
Introduction to the Humanities	

Introduction to Asian Humanities	
Near Eastern/Mediterranean courses	
South or East Asian Courses	
Religious Studies Upper-Division Requirements	24
Theory & Method in the Study of Religion	
Religious Studies Courses	
Liberal Studies Courses with Religious Studies content	
Modern and Classical Language Requirement	
Total Hours	44

Religious Studies Lower-Division Requirements

Rule: 20 credits.

Minimum Required Grade: C-

15 Total Credits Required

Introduction to Western Humanities

Rule: Take the following 2 courses.

Note: WRIT 101 is a pre-requisite or co-requisite. General Education fulfillment: GH 151L and GH 152L satisfy both the "designated writing course" and "Literary & Artistic Studies" requirements.

GH 151L	Introduction to Western Humanities Antiquity	3
GH 152L	Introduction to the Humanities Medieval to Modern	3
Total Hours		6

Minimum Required Grade: C-

Introduction to Asian Humanities

Rule: Take the following course.

GH 161H	Asian Humanities	3
Total Hours		3

Minimum Required Grade: C-

Near Eastern/Mediterranean Courses

Select one of the following:		3
RLST 204H	Intro to the Hebrew Bible	
RLST 205L	Introduction to New Testament	
RLST 225L	Christianity	
Total Hours		3

Minimum Required Grade: C-

South or East Asian Courses

Select one of the following:		3
RLST 232H	Buddhism	
RLST 234X	Hindu Religious Traditions	
RLST 238X	Japanese Religions	
Total Hours		3

Minimum Required Grade: C-

Religious Studies Upper-Division Requirements

Rule: 24 credits.

Minimum Required Grade: C-

24 Total Credits Required

Theory & Method in the Study of Religion

Rule: Take the following course.

Note: Please see the GHR Director for possible course substitution approval.

RLST 300	Theory & Method Study of Relig	3
Total Hours		3

Minimum Required Grade: C-

Religious Studies Courses

Select 7 from the following:		21
GH 326	Stories East and West	
GH 327L	Gender & Sexuality in Eng Fict	
GH 329	Fathers and Daughters in Western Literary Traditions	
GH 391	Special Topics	
GH 316E	Talking to God: Bhagavad Gita	
HSTA 347	Voodoo, Muslim, Church: Black Religion	
HSTA 417	Prayer & Civil Rights	
RLST 310	Topics in Biblical Studies	
RLST 320	Anct Judaism & Early Christnty	
RLST 335	Western Religious Thought I	
RLST 336	Western Religious Thought II	
RLST 353	Topics in South Asia Religions	
RLST 354	Topics in East Asia Religions	
RLST 366	Tibetan Civilization	
RLST 368	Contemporary Buddhism in S/SEAsia	
RLST 369	Contemplative Traditions of Asia	
RLST 370	Mysticism	
RLST 376	Contemporary Religious Thought	
RLST 391	Special Topics	
RLST 392	Independent Study	
RLST 491	Special Topics	
RLST 492	Independent Study	
Total Hours		21

Minimum Required Grade: C-

History Department

Robert H. Greene, 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. (p. 259)
- History B.A., History Education Concentration (p. 260)
- History-Political Science B.A. (p. 264)

Undergraduate Minor

- History (p. 263)

History B.A.

Bachelor of Arts - History

College Humanities & Sciences

Degree Specific Credits: 40

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

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 (<http://catalog.umd.edu/academics/general-education-requirements>) of the catalog.

Summary

Lower Division Core Courses	9
Methods	
Introductory History	
American History Electives	9
World History Electives	9
European History Electives	9
History Advanced Writing Courses	3
Total Hours	39

Lower Division Core Courses

Rule: Must complete the following subcategories

Minimum Required Grade: C-

9 Total Credits Required

Methods

Rule: Must complete the following course

HSTR 200	Intro: Historical Methods	1
Total Hours		1

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.

Select two of the following:	8
HSTA 101H	American History I
HSTA 102H	American History II
HSTA 103H	Honors American History I
HSTA 104H	Honors American History II
HSTR 101H	Western Civilization I
HSTR 102H	Western Civilization II
HSTR 103H	Honors Western Civilization I
HSTR 104H	Honors Western Civilization II
Total Hours	8

Minimum Required Grade: C-

American History Electives

Select at least 9 credits from the following:	9
HSTA 191	Special Topics
HSTA 255	Montana History

HSTA 262	Abolitionism
HSTA 291	Special Topics
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 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 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 364	Environmental History
HSTR 369	20th Cent Amer West
NASX 354X	Indians of MT since Rsrvtm Era
Total Hours	9

Minimum Required Grade: C-

World History Electives

Select at least 9 credits from the following:		9
HSTR 146H	The Silk Road	
HSTR 191	Special Topics	
HSTR 230H	Colonial Latin America	
HSTR 231H	Modern Latin America	
HSTR 240	East Asian Civilizations	
HSTR 241H	Central Asian Cult & Civ	
HSTR 262H	Islamic Civil: Classical Age	
HSTR 272E	Terrorism:Viol Mod Wrld	
HSTR 291	Special Topics	
HSTR 334	Latin America: Reform & Revolution	
HSTR 345H	Modern China	
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 History Electives

Select at least 9 credits from the following:		9
HSTR 312	Age of Absolut 1648-1789	
HSTR 320	Europ Social & Intellect Hist	
HSTR 323	Europ Social & Intellect Hist	
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 392	Independent Study	
HSTR 418	Britain 1500 - 1800	
HSTR 491	Special Topics	
HSTR 492	Independent Study	
Total Hours	9	

Minimum Required Grade: C-

History

Select one of the following:		3
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	

History Education

Individuals interested in teaching in K-12 schools must complete a degree in the content area they want to teach plus the teacher preparation program through the Department of Curriculum and Instruction. Individuals must complete the teaching major/teaching track within that degree program, which may contain different course requirements than the academic major since the sequence of courses is designed to meet state standards. Upon completion of the degree program with the teaching track and the secondary licensure program, one will be eligible for a standard Montana teaching license in this content area.

- Secondary Education Licensure Program (<http://www.coehs.umt.edu/departments/currinst/undergradprograms/seced/default.php>)
- Licensure Degree Requirements (p. 101)

Students may earn a teaching major in history by completing the requirements for the BA in history, to include the following:

- HSTA 101H or HSTA 102H;
- HSTR 101H or HSTR 102H;
- HSTR 200;
- HSTA 255;
- 9 credits in world history;
- 6 upper-division credits in American history;
- 6 upper-division credits in European history;
- 6 additional credits upper-division history electives;
- one HSTA/HSTR 400-level approved writing course; and
- EDU 497 .

All requirements for the history major apply. Students with a teaching major in history must also complete a teaching major or minor in a second field. For the history teaching major, students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. Students may also earn a teaching minor in history. See the Department of Teaching and Learning (p. 95) for more information.

Bachelor of Arts - History; History Education Option

College Humanities & Sciences

Degree Specific Credits: 46

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Note: A maximum of 60 credits in History are allowed. Penalties will apply for more than 60 credits. Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Teaching and Learning (p. 95) in the College of Education and Human Sciences for more information. A major GPA of 2.75 is required to be eligible for student teaching. Students who choose to complete a teaching major in history must also complete a teaching major or minor in a second field.

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

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
History Upper Division Writing Requirement	3
Total Hours	46

Lower Division Core Courses

Rule: Must complete the following subcategories

Minimum Required Grade: C-

12 Total Credits Required

American History Introductory Course

Rule: Must complete 1 of the following courses

Note: AP Policy: Those students scoring a "5" on the American History AP exam can be excused from the survey course requirement. Another American history course must then be taken in place of the survey course. Please consult with the Humanities Advisor with questions.

HSTA 101H	American History I	4
or HSTA 102H	American History II	
Total Hours		4

Minimum Required Grade: C-

European History Introductory Course

Rule: Must complete 1 of the following courses

Note: AP Policy: Those students scoring a "5" on the European History AP exam can be excused from the survey course requirement. Another European history course must then be taken in place of the survey course. Please consult with the Humanities Advisor with questions.

HSTR 101H	Western Civilization I	4
or HSTR 102H	Western Civilization II	
Total Hours		4

Minimum Required Grade: C-

Montana History

Rule: Complete the following course.

HSTA 255	Montana History	3
Total Hours		3

Minimum Required Grade: C-

Historical Methods Course

Rule: Complete the following course.

HSTR 200	Intro: Historical Methods	1
Total Hours		1

Minimum Required Grade: C-

American History Upper Division Electives

Select at least 6 credits from the following: 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 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

Select at least 9 credits from the following: 9

HSTR 146H	The Silk Road
HSTR 191	Special Topics
HSTR 230H	Colonial Latin America
HSTR 231H	Modern Latin America
HSTR 240	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 334	Latin America: Reform & Revolution
HSTR 345H	Modern China
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

Select at least 6 credits from the following: 6

HSTR 302H	Ancient Greece
HSTR 312	Age of Absolut 1648-1789
HSTR 320	Europ Social & Intellect Hist
HSTR 323	Europ Social & Intellect Hist
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 6

Minimum Required Grade: C-

Upper Division History Electives

Rule: Complete two additional upper division history courses

Note: Courses can be selected from HSTA or HSTR 300-level and above.

Minimum Required Grade: C-

6 Total Credits Required

Teaching Methods Requirement

Rule: Complete the following course.

Note: The EDU 497 course number is used for multiple courses. Students should register for EDU 497 Methods: 5-12 Social Studies.

EDU 497	Teaching and Assessing	4
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Total Hours 4

Minimum Required Grade: C-

History Upper Division Writing Requirement

Select one of the following: 3

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-

History Minor

Minor - History (Minor)

College Humanities & Sciences

Degree Specific Credits: 26

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Note: A minimum of 26 credits in History are required of which

- 6 credits must be in American (AM) History,
- 6 must be in European (EU) History, and
- 6 in World (WRLD) History (Asian, Islamic, African, Latin American or international).

History minors must complete at least 9 upper-division credits.

Summary

Introductory History Courses	8
American History Electives	6
World History Electives	6
European History Electives	6
Total Hours	26

Introductory History Courses

Note: Student must select either the regular or honors version of a course to apply to the requirement.

These courses count toward the American, World, and European electives.

AP Policy: Those students scoring a "5" on either the American History or European History AP exam are excused from the above requirement. These students earn credit toward graduation but do not earn credit toward the history degree.

Select two of the following: 8

HSTA 101H	American History I
HSTA 102H	American History II
HSTA 103H	Honors American History I
HSTA 104H	Honors American History II
HSTR 101H	Western Civilization I
HSTR 102H	Western Civilization II
HSTR 103H	Honors Western Civilization I
HSTR 104H	Honors Western Civilization II
Total Hours	8

Minimum Required Grade: C-

American History Electives

Select 6 credits from the following: 6

HSTA 191	Special Topics
HSTA 255	Montana History
HSTA 262	Abolitionism
HSTA 291	Special Topics
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 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
NASX 354X	Indians of MT since Rsrvtm Era
Total Hours	6

Minimum Required Grade: C-

World History Electives

Select 6 credits from the following: 6

HSTR 146H	The Silk Road
HSTR 191	Special Topics
HSTR 230H	Colonial Latin America
HSTR 231H	Modern Latin America
HSTR 240	East Asian Civilizations
HSTR 241H	Central Asian Cult & Civ
HSTR 262H	Islamic Civil: Classical Age
HSTR 272E	Terrorism:Viol Mod Wrld
HSTR 291	Special Topics
HSTR 334	Latin America: Reform & Revolution
HSTR 391	Special Topics
HSTR 392	Independent Study
HSTR 435	Lat Am Human Rgts & Memory
HSTR 491	Special Topics

HSTR 492	Independent Study	
Total Hours		6

Minimum Required Grade: C

European History Electives

Select 6 credits from the following:		6
HSTR 312	Age of Absolut 1648-1789	
HSTR 320	Europ Social & Intellect Hist	
HSTR 323	Europ Social & Intellect Hist	
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 392	Independent Study	
HSTR 491	Special Topics	
HSTR 492	Independent Study	
Total Hours		6

Minimum Required Grade: C-

Teaching History Track

A teaching minor is an academic minor which may contain different course requirements designed to meet state standards. Those interested in teaching in K-12 schools must complete a teaching major in a content area plus the teacher preparation program through the Department of Curriculum and Instruction. Additional teaching areas can be added through completion of either a teaching major or a teaching minor in that content area.

- Secondary Education Licensure Program (<http://www.coehs.umt.edu/departments/currinst/undergradprograms/seced/default.php>)
- Licensure Degree Requirements (p. 101)

The term 'minor' for this teaching option refers to courses that need to be completed. To sign up for this option, you need to contact the Curriculum and Instruction Department. Do not fill out a minor form for graduation or the minor section of the major change form. Approvals for this option must come from the Curriculum and Instruction Department.

Teaching Methods Requirement

Rule: Complete the following course.

Note: The EDU 497 course number is used for multiple courses. Students should register for EDU 497 Methods: 5-12 Social Studies.

EDU 497	Teaching and Assessing	4
Total Hours		4

Minimum Required Grade: C-

History-Political Science

History-Political Science

Individuals interested in teaching in K-12 schools must complete a degree in the content area they want to teach plus the teacher preparation program through the Department of Teaching and Learning. Individuals must complete the teaching major/teaching track within that degree program, which may contain different course requirements than the academic major since the sequence of courses is designed to meet state standards. Upon completion of the degree program with the teaching track and the secondary licensure program, one will be eligible for a standard Montana teaching license in this content area.

- Secondary Education Licensure Program (<http://www.coehs.umt.edu/departments/currinst/undergradprograms/seced/default.php>)
- Licensure Degree Requirements (http://archive.umt.edu/catalog/16_17/colleges-schools-programs/education-and-human-sciences/teaching-and-learning/lic-secondary-licensure/default.php)

This major is intended solely for students who want to be licensed to teach history, government, and one additional social science at the middle and high school levels. Requirements for the combined history/political science major are as follows: **in history**, a minimum of 31 credits, including: HSTR 101 or 102, HSTA 101 and 102, HSTR 200, HSTA 255, one elective course in world history, three upper-division elective courses to include at least one American and one European course, and one HSTA/HSTR 400-level approved writing course; **in political science**, a minimum of 30 credits, including: PSCI 210, 220, 230, 250, three upper-division elective courses in American government or public law, and three upper-division elective courses in comparative or international relations; **in one additional social science**, a minimum of 9 elective credits in economics or geography or psychology or sociology; and EDU 497 (C&I 428). Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. Students are eligible for a teaching license in social studies broadfield. See the Department of Curriculum & Instruction for more information.

To sign up for this option, you need to contact the Curriculum and Instruction Department. Do not fill out a major/minor form for graduation or the major/minor/concentration section of the major change form. Approvals for this option must come from the Curriculum and Instruction Department.

Tracks will not appear on your UM transcript, diploma, university lists, student data system, or university publication and are used for advising purposes only. You do not fill out a major change for a track.

Bachelor of Arts - History-Political Science

College Humanities & Sciences

Degree Specific Credits: 74

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

Lower Division Core Courses	28
Core Courses	
American History Introductory Courses	
Western History Introductory Courses	
Upper Division History Elective	3
American History Elective	3
World History Elective	3
European History Elective	3
American Government/Public Law Electives	9
Comparative/International Relations Electives	9
Additional Electives	9
Economics	
Geography	
Psychology	
Sociology	
Education Methods	4
Upper Division Writing Requirement	3
Total Hours	74

Lower Division Core Courses

Rule: Must complete the following subcategories

28 Total Credits Required

Core Courses

Rule: Must complete all of the following courses:

HSTA 255	Montana History	3
HSTR 200	Intro: Historical Methods	1
PSCI 210S	Intro to American Government	3
PSCI 220S	Intro to Comparative Govt	3
PSCI 230X	Intro to International Rel	3
PSCI 250E	Intro to Political Theory	3
Total Hours		16

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.

Select two of the following:	8
HSTA 101H	American History I
HSTA 102H	American History II
HSTA 103H	Honors American History I

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.

Select one of the following:	4
HSTR 101H	Western Civilization I
HSTR 102H	Western Civilization II
HSTR 103H	Honors Western Civilization I
HSTR 104H	Honors Western Civilization II
Total Hours	4

Minimum Required Grade: C-

Upper Division History Elective

Rule: Must complete at least 3 credits of upper division HSTA or HSTR electives.

Minimum Required Grade: C-

American History Elective

Note: Students are expected to take 3 additional Upper Division History credits beyond those specified and may be selected from this category.

Note: HSTR 391, HSTR 392, HSTR 491, HSTR 492 and HSTA 391 and HSTA 491 may apply to this requirement depending on the course content.

Select at least 3 credits from the following:	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 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 494	Seminar
HSTR 364	Environmental History
HSTR 369	20th Cent Amer West

NASX 354X	Indians of MT since Rsrvtm Era	
Total Hours		3

Minimum Required Grade: C-

World History Elective

Note: Students are expected to take 3 additional Upper Division History credits beyond those specified and may be selected from this category.

Note: HSTR 391, HSTR 392, HSTR 491, HSTR 492 and HSTA 391 and HSTA 491 may apply to this requirement depending on the course content.

Select at least 3 credits from the following:		3
HSTR 146H	The Silk Road	
HSTR 230H	Colonial Latin America	
HSTR 231H	Modern Latin America	
HSTR 240	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 435	Lat Am Human Rgts & Memory	
Total Hours		3

Minimum Required Grade: C-

European History Elective

Note: Students are expected to take 3 additional Upper Division History credits beyond those specified and may be selected from this category.

Note: HSTR 391, HSTR 492, HSTR 491, may apply to this requirement depending on the course content.

Select at least 3 credits from the following:		3
HSTR 312	Age of Absolut 1648-1789	
HSTR 320	Europ Social & Intellect Hist	
HSTR 323	Europ Social & Intellect Hist	
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	
Total Hours		3

Minimum Required Grade: C-

American Government/Public Law Electives

Select 9 credits from the following:		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	Public Policy Cycle and the Climate	
PSCI 471	American Constitutional Law	
PSCI 474	Civil Rights Seminar	

Total Hours 9

Minimum Required Grade: C-

Comparative/International Relations Electives

Select 9 credits from the following:		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 Electives

Economics

Note: ECNS 191, ECNS 391, ECNS 392, ECNS 491, and ECNS 492 may apply to this requirement depending on the course content.

Select 9 credits from the following: 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.

Select 9 credits from the following: 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	Cultural Ecology
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, and PSYX 491 may apply to this requirement depending on the course content.

Select 9 credits from the following: 9

PSYX 100S	Intro to Psychology
PSYX 105	Careers in Psychology
PSYX 120	Research Methods I
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	Research Methods III
PSYX 340	Abnormal Psychology
PSYX 345	Child & Adolescent Psych Dis
PSYX 348	Psychology of Family Violence
PSYX 352	Comparative Psychology
PSYX 356	Human Neuropsychology
PSYX 360	Social Psychology
PSYX 362	Multicultural Psychology
PSYX 376	Prin Cognit Behav Mod
PSYX 377	Personalized Student Instr
PSYX 378	Intro to Clinical Psych
PSYX 385	Psychology of Personality
PSYX 400	History & System in Psychology

PSYX 442	Counseling Theories in Context	
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.

Select 9 credits from the following: 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 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 330	Juvenile Delinquency
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-

Upper Division Writing Requirement

Select one of the following: 3

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

Teaching Social Studies Track

Individuals interested in teaching in K-12 schools must complete a degree in the content area they want to teach plus the teacher preparation program through the Department of Curriculum and Instruction. Individuals must complete the teaching major/teaching track within that degree program, which may contain different course requirements than the academic major since the sequence of courses is designed to meet state standards. Upon completion of the degree program with the teaching track and the secondary licensure program, one will be eligible for a standard Montana teaching license in this content area.

- Secondary Education Licensure Program (<http://www.coehs.umt.edu/departments/currinst/undergradprograms/seced/default.php>)
- Licensure Degree Requirements (p. 101)

This major is intended solely for students who want to be licensed to teach history, government, and one additional social science at the middle and high school levels. Requirements for the combined history/political science major are as follows:

- **in history**, a minimum of 31 credits, including:
 - HSTR 101H or HSTR 102H,
 - HSTA 101H and HSTA 102H, HSTR 200, HSTA 255,
 - one elective course in world history,
 - three upper-division elective courses to include at least one American and one European course, and
 - one HSTA/HSTR 400-level approved writing course;
- **in political science**, a minimum of 30 credits, including:
 - PSCI 210S, PSCI 220S, PSCI 230X, PSCI 250E,
 - three upper-division elective courses in American government or public law, and
 - three upper-division elective courses in comparative or international relations;
- **in one additional social science**, a minimum of 9 elective credits in economics or geography or psychology or sociology; and EDU 497 .

Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. Students are eligible for a teaching license in social studies broadfield. See the Department of Curriculum & Instruction (p. 95) for more information.

To sign up for this option, you need to contact the Curriculum and Instruction Department. Do not fill out a major/minor form for graduation or the major/minor/concentration section of the major change form. Approvals for this option must come from the Curriculum and Instruction Department.

Tracks will not appear on your UM transcript, diploma, university lists, student data system, or university publication and are used for advising purposes only. You do not fill out a major change for a track.

Note: Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. Students who complete the history/political science

combined major are eligible for a teaching license in social studies broadfield. See the Department of Teaching and Learning (p. 95) 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.

Education Methods

Rule: Complete the following course.

Note: The EDU 497 course number is used for multiple courses. Students should register for EDU 497 Methods: 5-12 Social Studies.

EDU 497	Teaching and Assessing	4
Total Hours		4

Minimum Required Grade: C-

Mathematical Sciences Department

Emily Stone, Chair

Mathematics is studied both as a tool and for its own sake. Its usefulness in the sciences - physical, biological, social, behavioral, and environmental - and in decision-making processes is so established that it is an indispensable part of many curricula.

Mathematics is chosen as a major area of study by individuals who find it challenging, fascinating, and beautiful. It is also appreciated by many who seek primarily to use mathematics as a tool.

A career in mathematics, except for teaching at the secondary level, generally requires a graduate degree as preparation. Careers include teaching, research, and the application of mathematics to diverse problems in institutions of higher learning, business, industry, and government.

The Bachelor of Arts, Master of Arts, and Doctor of Philosophy degrees are offered as well as a Bachelor of Science in Mathematical Sciences-Computer Science.

High School Preparation: For studying mathematics at the University level, it is recommended that the high school course work consist of four years of college-preparatory mathematics, including geometry, trigonometry, and college algebra or precalculus. A course in calculus or statistics is helpful, but not necessary. It is unusual to complete an undergraduate degree in mathematics in four years without the necessary background to take M 171 during the freshman year (preferably during the first semester at the university).

Undergraduate

- Mathematics B.A. (p. 277)
- Mathematics B.A., Applied Mathematics Concentration (p. 270)
- Mathematics B.A., Combinatorics and Optimization Concentration (p. 272)
- Mathematics B.A., Mathematics Education Concentration (p. 278)
- Mathematics B.A., Pure Mathematics Concentration (p. 280)
- Mathematics B.A., Statistics Concentration (p. 281)
- Mathematical Sciences-Computer Sciences B.S. (p. 274)

Undergraduate Minors

- Mathematics (p. 269)

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 Humanities & Sciences

Degree Specific Credits: 23

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Summary

Calculus Requirement for a Minor in Mathematics

Elective Courses for a Minor in Mathematics	23
Total Hours	23

Calculus Requirement for a Minor in Mathematics

Note: M 172 or M 182 are recommended since they are prerequisites for many upper-division mathematics courses.

Select one of the following:	4
M 162 Applied Calculus	
M 172 Calculus II (recommended)	
M 182 Honors Calculus II (recommended)	
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

A teaching minor is an academic minor which may contain different course requirements designed to meet state standards. Those interested in teaching in K-12 schools must complete a teaching major in a content area plus the teacher preparation program through the Department of

Curriculum and Instruction. Additional teaching areas can be added through completion of either a teaching major or a teaching minor in that content area.

- Secondary Education Licensure Program (<http://www.coehs.umt.edu/departments/currinst/undergradprograms/seced/default.php>)
- Licensure Degree Requirements (p. 101)

The term 'minor' for this teaching option refers to courses that need to be completed. To sign up for this option, you need to contact the Curriculum and Instruction Department. Do not fill out a minor form for graduation or the minor section of the major change form. Approvals for this option must come from the Curriculum and Instruction Department.

Summary

Mathematical Science Courses	27
Mathematics Teaching Methods Course	4
Total Hours	31

Mathematical Sciences Courses

Rule: Take all of the following courses.

M 171	Calculus I	4
or M 181	Honors Calculus I	
M 182	Honors Calculus II	4
or M 182	Honors Calculus II	
M 221	Introduction to Linear Algebra	4
M 301	Mathematics Technology for Teachers	3
M 307	Introduction to Abstract Mathematics	3
M 326	Number Theory	3
M 439	Euclidean and Non-Euclidean 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

Rule: Take the following course.

Note: The course number EDU 497 covers many different teaching method courses. The section of EDU 497 entitled "Methods: 5 - 12 Mathematics" is required for the Teaching Minor in Mathematics Education.

EDU 497	Teaching and Assessing	4
Total Hours		4

Minimum Required Grade: C-

Secondary Teaching Licensure

Note: For licensure to teach mathematics, a student must also gain admission to the Teacher Education Program and meet all the requirements for secondary teaching licensure (see the College of Education and Human Sciences (p. 83)).

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 Humanities & Sciences

Degree Specific Credits: 67

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Note: The degree specific credits are much lower for double-majors and for students completing an additional minor (in another subject):

- 42 credits for students completing a second major, and
- 46 credits for students completing a minor.

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

Mathematics Core Courses	23
Upper-Division Mathematics Requirement	23
Upper-Division Elective Courses	
Upper-Division Elective Computer Labs	
Science Requirement	18
Advanced College Writing Requirement (usually fulfilled with courses that count towards the Upper-Division Mathematics Requirement)	
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

Rule: Take 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: Take 23 credits in this category.

Note:

1. Students completing a minor (in another subject) need take only 20 credits.
2. Students completing a second major need take only 18 credits.

Minimum Required Grade: C-

23 Total Credits Required

Upper-Division Elective Courses

Note:

1. Students completing a minor (in another subject) or a second major need take only 6 courses (totaling 18 credits or more).
2. Residency Requirement: At least 4 of the courses in this category must be taken at UM-Missoula (only 3 if M 307 is taken at UM-Missoula).
3. Note that STAT 451 does not count toward this requirement.

Take 7 courses from the following list; at least 3 of them must be at the 400 level:

M 301	Mathematics Technology for Teachers
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 Non-Euclidean Geometry
M 440	Numerical Analysis
M 445	Statistical, Dynamical, and Computational Modeling
M 461	Practical Big Data 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.

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-

18 Total Credits Required

Advanced College Writing Requirement

Rule: Take 1 of the following 2 courses, or any other approved Advanced College Writing course.

M 429	History of Mathematics	3
or M 499	Senior Thesis	
Total Hours		3

Minimum Required Grade: C-

GPA Requirement

Note:

1. A cumulative GPA of 2.0 is required for all courses used to fulfill major requirements.
2. In addition, a cumulative GPA of 2.0 is required for all mathematical sciences courses used to fulfill major requirements. (Mathematical sciences courses are those with a prefix of M or STAT.)

Foreign Language/Computer Science Requirement

Rule: Either complete the General Education Requirement "Group III: Modern and Classical Language" (not the symbolic systems exception), or take one course from the following list.

Note: Students completing a second major are exempt from this requirement.

Select one of the following:	3
CSCI 100 Intro to Programming	
CSCI 135 Fund of Computer Science I	
CSCI 136 Fund of Computer Science II	
CSCI 250 Computer Mdlng/Science Majors	
Total Hours	3

Minimum Required Grade: C-

Requirements for the Applied Mathematics Concentration

Rule: Complete the following subcategories

Minimum Required Grade: C-

13-14 Total Credits Required

Applied Mathematics Option: Core Courses

Rule: Take 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

Rule: Take 2 of the following courses.

Note: In addition, M 381 and M 485 are also recommended.

Select two of the following:	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-

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 Humanities & Sciences

Degree Specific Credits: 67

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Note: The degree specific credits are much lower for double-majors and for students completing an additional minor (in another subject): 41 credits for students completing a second major, and 46 credits for students completing a minor.

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

Mathematics Core Courses	23
Upper-Division Mathematics Requirement	23
Upper-Division Elective Courses	
Upper-Division Elective Computer Labs	
Science Requirement	18
Advanced College Writing Requirement (usually fulfilled with a course that counts towards the Upper-Division Mathematics Requirement)	
Foreign Language/Computer Science Requirement	3
Requirements for the Combinatorics & Optimization Concentration (usually fulfilled with courses that count towards the Upper-Division Mathematics Requirement)	
Combinatorics & Optimization Concentration: Core Courses	
Combinatorics & Optimization Concentration: Elective Courses	
Total Hours	67

Mathematics Core Courses

Rule: Take 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: Take 23 credits in this category.

Note:

1. Students completing a minor (in another subject) need take only 20 credits.
2. Students completing a second major need take only 18 credits.

Minimum Required Grade: C-

23 Total Credits Required

Upper-Division Elective Courses

Note:

1. Students completing a minor (in another subject) or a second major need take only 6 courses (totaling 18 credits or more).
2. Residency Requirement: At least 4 of the courses in this category must be taken at UM-Missoula (only 3 if M 307 is taken at UM-Missoula).
3. Note that STAT 451 does not count toward this requirement.

Take 7 courses from the following list; at least 3 of them must be at the 400 level:

M 301	Mathematics Technology for Teachers
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 Non-Euclidean Geometry
M 440	Numerical Analysis
M 445	Statistical, Dynamical, and Computational Modeling
M 461	Practical Big Data 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.

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-

18 Total Credits Required

Advanced College Writing Requirement

Rule: Take 1 of the following 2 courses, or any other approved Advanced College Writing course.

M 429	History of Mathematics	3
or M 499	Senior Thesis	
Total Hours		3

Minimum Required Grade: C-

GPA Requirement

Note:

1. A cumulative GPA of 2.0 is required for all courses used to fulfill major requirements.
2. In addition, a cumulative GPA of 2.0 is required for all mathematical sciences courses used to fulfill major requirements. (Mathematical sciences courses are those with a prefix of M or STAT.)

Foreign Language/Computer Science Requirement

Rule: Either complete the General Education Requirement "Group III: Modern and Classical Language" (not the symbolic systems exception), or take one course from the following list.

Note: Students completing a second major are exempt from this requirement.

Select one of the following:		3
CSCI 100	Intro to Programming	
CSCI 135	Fund of Computer Science I	
CSCI 136	Fund of Computer Science II	

CSCI 250	Computer Mdlng/Science Majors	
Total Hours		3

Minimum Required Grade: C-

Requirements for the Combinatorics & Optimization Concentration

Minimum Required Grade: C-

12-13 Total Credits Required

Combinatorics & Optimization Option: Core Courses

Rule: Take 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

Select one of the following: 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-

Mathematical Sciences-Computer Science (Combined Major)

The purpose of the combined program is to provide a thorough background in both allied disciplines and to inculcate a deeper understanding of their goals and methods. A student must complete 60 credits in the two disciplines:

- 30 of these credits in Computer Science courses and
- 30 of these credits in Mathematical Sciences courses.

Each student plans a program in consultation with both a Computer Science and a Mathematical Sciences advisor. Students planning to attend graduate school in computer science or the mathematical sciences should consult with their respective advisors.

Bachelor of Science - Mathematical Sci-Computer Sci

College Humanities & Sciences

Degree Specific Credits: 73

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umd.edu/academics/general-education-requirements>) of the catalog.

Summary

Mathematical Sciences	31
Computer Science	30
Science Requirement	9-10
Biology	
Chemistry	
Physics	
Public Speaking Requirement	3
Advanced College Writing Requirement	3
Total Hours	76-77

Mathematical Sciences

Rule: Complete the following subcategories.

31 Total Credits Required

Mathematical Sciences Core

Rule: 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).

Complete 12 credits from 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 Non-Euclidean Geometry	
M 440	Numerical Analysis	
M 445	Statistical, Dynamical, and Computational Modeling	
M 461	Practical Big Data 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

Rule: 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 Languages w/ C/C++	4
CSCI 232	Data Structures and Algorithms	4
CSCI 332	Design/Analysis of Algorithms	3
CSCI 361	Computer Architecture	3
Total Hours		21

Minimum Required Grade: C-

Computer Science Electives

Rule: Complete 9 credits from the following courses.

Note:

1. A total of at most three of the nine credits of Computer Science Electives may be in CSCI 398 or 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).

Complete 9 credits from the following		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 Prgrmg Theory/Practice I	
CSCI 427	Adv Prgrmg 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
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Minimum Required Grade: C-

Science Requirement

Rule: Complete the course work from 1 of the following subcategories.

9-10 Total Credits Required

Biology

Rule: If you choose biology, complete all of the following courses.

BIOB 160N	Principles of Living Systems	3
BIOB 161N	Prncpls of Living Systems Lab	1
BIOB 170N	Prncpls Biological Diversity	3
BIOB 171N	Prncpls Biological Dvrsty Lab	2
Total Hours		9

Minimum Required Grade: C-

Chemistry

Rule: If you choose chemistry, complete all of the following courses.

CHMY 141N	College Chemistry I	5
& CHMY 142N	and College Chemistry I Lab	
CHMY 143N	College Chemistry II	5
& CHMY 144N	and College Chemistry II Lab	
Total Hours		10

Minimum Required Grade: C-

Physics

Rule: 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

Rule: Complete 1 of the following courses.

COMX 111A	Intro to Public Speaking	3
or COMX 242	Argumentation	
Total Hours		3

Minimum Required Grade: C-

Advanced College Writing Requirement

Note: Any other approved Advanced College Writing course will also fulfill this requirement.

Select 3 credits from the following:		3
CSCI 315E	Computers, Ethics, and Society	
CSCI 499	Senior Thesis/Capstone	
M 429	History of Mathematics	
M 499	Senior Thesis	
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

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

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)

M 461	Practical Big Data 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

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

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 Prgrmg 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 Humanities & Sciences

Degree Specific Credits: 67

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Note: The degree specific credits are much lower for double-majors and for students completing an additional minor (in another subject):

- 41 credits for students completing a second major, and
- 46 credits for students completing a minor.

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

Mathematics Core Courses	23
Upper-Division Mathematics Requirement	23
Upper-Division Elective Courses	
Upper-Division Elective Computer Labs	
Science Requirement	18
Advanced College Writing Requirement (usually fulfilled with a course that counts towards the Upper-Division Mathematics Requirement)	
Foreign Language/Computer Science Requirement	3
Total Hours	67

Mathematics Core Courses

Rule: Take 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: Take 23 credits in this category.

Note:

1. Students completing a minor (in another subject) need take only 20 credits.
2. Students completing a second major need take only 18 credits.

Minimum Required Grade: C-

23 Total Credits Required

Upper-Division Elective Courses

Note:

1. Students completing a minor (in another subject) or a second major need take only 6 courses (totaling 18 credits or more).
2. Residency Requirement: At least 4 of the courses in this category must be taken at UM-Missoula (only 3 if M 307 is taken at UM-Missoula).
3. Note that STAT 451 does not count toward this requirement.

Take 7 courses from the following list; at least 3 of them must be at the 400 level

M 301	Mathematics Technology for Teachers
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 Non-Euclidean Geometry
M 440	Numerical Analysis
M 445	Statistical, Dynamical, and Computational Modeling
M 461	Practical Big Data 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.

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-

18 Total Credits Required

Advanced College Writing Requirement

Rule: Take 1 of the following 2 courses, or any other approved Advanced College Writing course.

M 429	History of Mathematics	3
or M 499	Senior Thesis	
Total Hours		3

Minimum Required Grade: C-

GPA Requirement

Note:

1. A cumulative GPA of 2.0 is required for all courses used to fulfill major requirements.

2. In addition, a cumulative GPA of 2.0 is required for all mathematical sciences courses used to fulfill major requirements. (Mathematical sciences courses are those with a prefix of M or STAT.)

Foreign Language/Computer Science Requirement

Rule: Either complete the General Education Requirement Group III: Modern and Classical Language or take one course from the following list.

Note: Students completing a second major are exempt from this requirement.

Select one from the following:	3
CSCI 100	Intro to Programming
CSCI 135	Fund of Computer Science I
CSCI 136	Fund of Computer Science II
CSCI 250	Computer Mdlng/Science Majors
Total Hours	3

Minimum Required Grade: C-

Mathematics Education

Individuals interested in teaching in K-12 schools must complete a degree in the content area they want to teach plus the teacher preparation program through the Department of Teaching and Learning. Individuals must complete the teaching major/teaching track within that degree program, which may contain different course requirements than the academic major since the sequence of courses is designed to meet state standards. Upon completion of the degree program with the teaching track and the secondary licensure program, one will be eligible for a standard Montana teaching license in this content area.

- Secondary Education Licensure Program (<http://www.coehs.umt.edu/departments/currinst/undergradprograms/seced/default.php>)
- Licensure Degree Requirements (p. 101)

Bachelor of Arts - Mathematics; Mathematics Education Concentration

College Humanities & Sciences

Degree Specific Credits: 67-68

Required Cumulative GPA: 2.5

Catalog Year: 2017-2018

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 (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

Mathematical Sciences Courses Required for the Mathematics Education Concentration	41-42
Core Courses	
Elective Course	
Mathematics Teaching Methods Course	
Student Teaching Requirement for the Mathematical 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

Rule: Take all of the following courses.

Note:

1. Residency Requirement: At least 4 of the upper-division courses in this category must be taken at UM Missoula (only 3 if the Elective Course is an upper-division course taken at UM-Missoula).
2. Note that taking M 429 satisfies the 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.

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	Mathematics Technology for Teachers	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 Non-Euclidean 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

Select one of the following:	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	Practical Big Data 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

Rule: Take the following course.

Note: The course number EDU 497 covers many different teaching methods courses. The section of EDU 497 entitled "Methods: 5 - 12 Mathematics" is required for the Mathematics Education option.

EDU 497	Teaching and Assessing	4
Total Hours		4

Minimum Required Grade: C-

Student Teaching Requirement for the Mathematics Concentration

Take the following Course	14
EDU 495	Student Teaching
Total Hours	14

Minimum Required Grade: C-

Science Requirement for the Mathematics Education Concentration

Rule: Take 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-

12 Total Credits Required

Secondary Teaching Licensure

Note: For licensure to teach mathematics, a student must also gain admission to the Teacher Education Program and meet all the requirements for secondary teaching licensure (see the College of Education and Human Sciences (p. 83)).

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 Humanities & Sciences

Degree Specific Credits: 68

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Note: The degree specific credits are much lower for double-majors and for students completing an additional minor (in another subject):

- 44 credits for students completing a second major, and
- 47 credits for students completing a minor.

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

Mathematics Core Courses	23
Upper-Division Mathematics Requirement	23
Upper-Division Elective Courses	
Upper-Division Elective Computer Labs	
Science Requirement	18
Advanced College Writing Requirement (usually fulfilled with a course that counts towards the Upper-Division Mathematics Requirement)	
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

Rule: Take 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: Take 23 credits in this category.

Note:

1. Students completing a minor (in another subject) need take only 20 credits.
2. Students completing a second major need take only 18 credits.

Minimum Required Grade: C-

23 Total Credits Required

Upper-Division Elective Courses

Note:

1. Students completing a minor (in another subject) or a second major need take only 6 courses (totaling 18 credits or more).
2. Residency Requirement: At least 4 of the courses in this category must be taken at UM-Missoula (only 3 if M 307 is taken at UM-Missoula).
3. Note that STAT 451 does not count toward this requirement.

Take 7 courses from the following list; at least 3 of them must be at the 400 level.:

M 301	Mathematics Technology for Teachers
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 Non-Euclidean Geometry
M 440	Numerical Analysis
M 445	Statistical, Dynamical, and Computational Modeling
M 461	Practical Big Data 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.

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-

18 Total Credits Required

Advanced College Writing Requirement

Rule: Take 1 of the following 2 courses, or any other approved Advanced College Writing course.

M 429	History of Mathematics	3
or M 499	Senior Thesis	
Total Hours		3

Minimum Required Grade: C-

GPA Requirement

Note:

1. A cumulative GPA of 2.0 is required for all courses used to fulfill major requirements.
2. In addition, a cumulative GPA of 2.0 is required for all mathematical sciences courses used to fulfill major requirements. (Mathematical sciences courses are those with a prefix of M or STAT.)

Foreign Language/Computer Science Requirement

Rule: Either complete the General Education Requirement "Group III: Modern and Classical Language" (not the symbolic systems exception), or take one course from the following list.

Note: Students completing a second major are exempt from this requirement.

Select one of the following:		3
CSCI 100	Intro to Programming	
CSCI 135	Fund of Computer Science I	
CSCI 136	Fund of Computer Science II	
CSCI 250	Computer Mdlng/Science Majors	
Total Hours		3

Minimum Required Grade: C-

Requirements for the Pure Mathematics Concentration

Select four of the following:		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-

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 Humanities & Sciences

Degree Specific Credits: 67

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Note: The degree specific credits are much lower for double-majors and for students completing an additional minor (in another subject):

- 41 credits for students completing a second major, and
- 46 credits for students completing a minor.

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

Mathematics Core Courses	23
Upper-Division Mathematics Requirement	23
Upper-Division Elective Courses	
Upper-Division Elective Computer Labs	
Science Requirement	18
Advanced College Writing Requirement (usually fulfilled with a course that counts towards the Upper-Division Mathematics Requirement)	
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

Rule: Take 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: Take 23 credits in this category.

Note:

1. Students completing a minor (in another subject) need take only 20 credits.
2. Students completing a second major need take only 18 credits.

Minimum Required Grade: C-

Upper-Division Elective Courses

Note:

1. Students completing a minor (in another subject) or a second major need take only 6 courses (totaling 18 credits or more).
2. Residency Requirement: At least 4 of the courses in this category must be taken at UM-Missoula (only 3 if M 307 is taken at UM-Missoula).
3. Note that STAT 451 does not count toward this requirement.

Take 7 courses from the following list; at least 3 of them must be at the 400 level:

M 301	Mathematics Technology for Teachers
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 Non-Euclidean Geometry
M 440	Numerical Analysis
M 445	Statistical, Dynamical, and Computational Modeling
M 461	Practical Big Data 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.

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.

- 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-

18 Total Credits Required

Advanced College Writing Requirement

Rule: Take 1 of the following 2 courses, or any other approved Advanced College Writing course.

M 429	History of Mathematics	3
or M 499	Senior Thesis	
Total Hours		3

Minimum Required Grade: C-

GPA Requirement

Note:

- A cumulative GPA of 2.0 is required for all courses used to fulfill major requirements.
- In addition, a cumulative GPA of 2.0 is required for all mathematical sciences courses used to fulfill major requirements. (Mathematical sciences courses are those with a prefix of M or STAT.)

Foreign Language/Computer Science Requirement

Rule: Either complete the General Education Requirement "Group III: Modern and Classical Language" (not the symbolic systems exception), or take one course from the following list.

Note: Students completing a second major are exempt from this requirement.

Select one of the following: 3

CSCI 100	Intro to Programming	
CSCI 135	Fund of Computer Science I	
CSCI 136	Fund of Computer Science II	
CSCI 250	Computer Mdlng/Science Majors	
Total Hours		3

Minimum Required Grade: C-

Requirements for the Statistics Concentration

Note: Additional mathematics and statistics courses chosen with advisor.

Select four of the following: 12

M 461	Practical Big Data 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-

Military Science

Reserve Officers Training Corps, Chad Carlson, Chair

Army ROTC (Reserve Officers' Training Corps) offers college students the opportunity to serve as commissioned officers in the U.S. Army, the Army National Guard, or the U.S. Army Reserve upon graduation. ROTC enhances a student's education by providing unique leadership and management training along with practical leadership experience. Students develop many of the qualities basic to success while earning a college degree and an officer's commission at the same time.

The Margin of Difference

Army ROTC cadets learn to be leaders and receive hands-on experience in managing physical, financial, and human resources. They develop self-confidence and superior decision-making skills. Employers value these leadership qualities and recognize the associated potential in ROTC graduates.

Four-Year Program

The four-year Army ROTC program consists of two parts:

- the Basic Course and
- the Advanced Course.

Basic Course

The basic course is normally taken during the first two years of college and may be taken without incurring any military obligation. This course covers such subjects as management principles, national defense, military history, and leadership development. Basic course classes include adventure training such as squad tactics and small arms marksmanship. Additional opportunities are also available to conduct small unit training exercises throughout Western Montana. In addition, a variety of outside social and professional enrichment activities are available. All necessary ROTC textbooks, uniforms, and other essential materials for the basic course are furnished to students at no cost. After completing the basic course, students who have demonstrated the potential to become officers and who have met the physical and scholastic standards are eligible to enroll in the Advanced Course. Compression of the Basic Course into two semesters may be arranged for those students who did not take military science courses during their Freshman year.

Advanced Course

The Advanced Course is usually taken during the final two years of college. Instruction includes organization and management, tactics, ethics, critical thinking, creative problem solving and further leadership development. Uniforms and equipment in the Advanced Course are furnished to students at no cost. During the summer between their junior and senior years of college, Advanced Course cadets attend Cadet Summer Training (CST), a fully paid four-week leadership practicum. LDAC gives cadets the chance to apply what they have learned in the classroom and introduces them to Army life while also receiving academic credit. Completion of the Advanced Course requires

two years of study. Each cadet in the Advanced Course receives a subsistence allowance of up to \$4,500 for each year of attendance.

Two-Year Program

The two-year program applies to incoming juniors and community college graduates, students at four-year colleges who did not take ROTC during their first two years of school, and students entering a two-year postgraduate course of study. To enter the two-year program, students must attend a fully paid four-week Leader's Training Course (LTC), normally held during the summer between their sophomore and junior years of college. At LTC, students learn to challenge themselves physically and mentally, and to build their confidence and leadership skills. After successfully completing LTC, students who meet all the necessary enrollment requirements may participate in the Advanced Course.

Scholarships and Financial Assistance

Army ROTC scholarships are offered for four, three and two years and are awarded on a competitive basis. Each scholarship pays 100% of student's tuition and fees, \$1200 a year for textbooks and supplies, and a monthly stipend totaling up to \$4,500 per year while the scholarship is in effect. Four-year scholarships are awarded to students who will be entering college as freshmen. Two and three-year scholarships are awarded to students already enrolled in college and to Army enlisted personnel on active duty. Additionally, students who attend LTC (see two-year program) may compete for two-year scholarships while at the course. Scholarship recipients can pursue degrees in any accredited four year program at the University of Montana. Students who receive scholarships are required to attain undergraduate degrees in the fields in which their scholarships were awarded.

Veterans

Veterans may apply their military experience as credit toward the ROTC Basic Course. If eligible, a veteran may enroll directly into the Advanced Course.

Simultaneous Membership Program

This program allows students to be members of the Army National Guard or the Army Reserve and to enroll in Army ROTC at the same time. Students participating in the Simultaneous Membership Program receive up to \$4,000 per year in tuition assistance, \$4,500 per year in monthly stipends and an additional \$20,000 per year in other benefits. There are also scholarships available for students participating in the Simultaneous Membership Program that are interested in staying in the Army National Guard or the Army Reserve upon graduation that pay up to \$8,500 per year for living expenses and \$1,200 per year for textbooks, supplies and other equipment. These scholarships are in addition to many of the current benefits students receive as part of the Simultaneous Membership Program.

Service Obligation

There is no military service obligation for basic course students, unless on scholarship. Advanced course and scholarship (contracted) students incur an obligation to serve in the active Army, Army Reserve or National Guard.

Commission Requirements

In order to earn a commission as a Second Lieutenant in the United States Army, each student must:

1. Complete all required Military Science instruction while attending college as a full-time student, and obtain a baccalaureate or higher degree.
2. Complete a PMS approved US History course.
3. Meet medical and physical fitness standards.
4. Be a U.S. citizen.
5. Successfully complete Cadet Summer Training.
6. Be recommended by the Professor of Military Science.

Undergraduate Minors

- Military Studies (p. 284)

Military Studies Minor

Minor - Military Studies (Minor)

College Humanities & Sciences

Degree Specific Credits: 33

Required Cumulative GPA: 2.5

Catalog Year: 2017-2018

Note: A total of 24 credits of MSL (Military Science Leadership) courses are allowed toward the bachelor degree for contracted students. A total of 12 credits are allowed toward the bachelor degree for non-contracted students. Obtain a grade of "C" or better in all courses used toward the minor, and a cumulative GPA of 2.5 for Military Science courses.

Summary

Lower Core Courses	12
Upper Core Courses	12
War History Requirement	3
History/Political Science Requirement	6
Total Hours	33

Lower Core Courses

Rule: Must complete all of the following:

Note: The department may waive the Basic Course requirements for following situation courses:

- prior military service,
- Advanced Individual Training (AIT),
- Leader's Training Course (LTC) or
- Accelerated Cadet Commissioning Training (ACCT).

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

Minimum Required Grade: C

Upper Core Courses

Rule: Must complete all of the following:

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

Minimum Required Grade: C

War History Requirement

Rule: Must complete 1 of the following

HSTA 316	American Civil War Era	3
or HSTA 333	American Military History	
Total Hours		3

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. Student can also take HSTR 301X or HSTR 304H to satisfy the History requirement.

Select at least 3 credits from the following:		3
HSTA 316	American Civil War Era	
HSTA 333	American Military History	
HSTR 272E	Terrorism:Viol Mod Wrld	
PSCI 230X	Intro to International Rel	3
or PSCI 335	American Foreign Policy	
Total Hours		6

Minimum Required Grade: C

Modern and Classical Languages Literatures Department

Elizabeth Ametsbichler, Chair

Instruction is offered in the following languages and literatures:

- Arabic,
- Chinese,
- French,
- German,
- Classical Greek,
- Italian,

- Japanese,
- Latin,
- Russian and
- Spanish, as well as in
- linguistics,
- foreign literatures in English translation, film, and the study of foreign cultures.

Undergraduate courses have been planned to meet the needs of students who began studying a language in high school as well as those who undertake such study for the first time at the University.

The courses are intended to serve several purposes:

1. Contribute to the general education of students by giving them an opportunity to gain insight into patterns of living and thinking which are different from their own;
2. Enable students to gain proficiency in the language;
3. Prepare candidates for careers in research and college teaching by providing a solid basis for graduate studies in the various languages;
4. Prepare future teachers of foreign languages;
5. Provide language training requisite to careers in government, foreign commerce, and library work;
6. Enable students to read foreign publications and to meet graduate foreign language requirements in their field.

The Department of Modern and Classical Languages and Literatures offers undergraduate majors in

- Classics (Greek and Latin),
- French,
- German,
- Japanese,
- Russian, and
- Spanish.

Within Classics, it is possible to elect options in

- Classical Languages (Latin and Greek),
- Classical Civilization, and
- Latin.

There are undergraduate minors in

- Arabic and
- Chinese.

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 (p. 30) section of this catalog.)

- 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).
- Credit by examination:** A student with extensive language study may score high enough on the placement exam to qualify for University credits if she or he places into 202 or 301. By taking the course into which she or he placed (202 or 301) and receiving a B (3.00) or better, the student may then receive four by-pass credits (Pass grade only) for the preceding course (201 or 202).

Students who elect not to take this exam may:

- Satisfy the General Education Competency Requirement in Foreign Language by successfully completing a University foreign language 102 (second semester) course.
- Estimate their placement level for further study by the approximate equating of one year of high school study to one semester of university study. Students should consult with the department in making this estimate.

Foreign Study Programs. The Department of Modern and Classical Languages and Literatures offers programs of accredited study in Austria, 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 Modern and Classical Languages and Literatures. The department also sponsors work/study internships abroad for students in Japanese.

Undergraduate

- Classics B.A., Classical Civilization Concentration (p. 287)
- Classics B.A., Classical Languages Concentration (p. 288)
- Classics B.A., Latin Concentration (p. 296)
- French B.A. (p. 289)
- German B.A. (p. 291)
- Japanese B.A. (p. 294)
- Russian B.A. (p. 298)
- Spanish B.A. (p. 300)

Undergraduate Minors

- Arabic Studies (p. 286)
- Chinese (p. 287)
- Classical Civilization (p. 288)
- French (p. 290)
- German (p. 293)
- Greek (p. 294)
- Japanese (p. 295)
- Latin American Studies (p. 296)
- Latin (p. 297)
- Russian (p. 299)
- Russian Studies (p. 300)
- Spanish (p. 301)

Arabic Studies Minor

Minor - Arabic Studies (Minor)

College Humanities & Sciences

Degree Specific Credits: 30

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Note: At least 9 credits must be of upper division courses. A minimum grade of C is required in all the courses taken to fulfill the minor.

Summary

Lower Core Courses	18
Upper Core Courses	9
Electives	3
Total Hours	30

Lower Core Courses

Rule: Must complete all of the following:

ARAB 101	Elementary Modern Standard Arabic I	5
ARAB 102	Elementary Modern Standard Arabic II	5
ARAB 201	Intermediate Modern Standard Arabic I	4
ARAB 202	Intermediate Modern Standard Arabic II	4
Total Hours		18

Minimum Required Grade: C

Upper Core Courses

Rule: Must complete all of the following:

ARAB 301	Adv Modern Standard Arabic I	3
ARAB 302	Adv Modern Standard Arabic II	3
ARAB 305	The Arab World	3
Total Hours		9

Minimum Required Grade: C

Electives

Note: ARAB 392: Students may count up to 3 credits from an independent study related to the Arabic language or the Arab world. Before taking an independent study outside the Arabic program, you need to consult with the advisor of the minor. Upon consent of the advisor of the academic minor, up to three credits (either taken at the University of Montana or transferred from another college or university) may be counted as part of the electives if at least 75% of the content is related to the Arab world.

Select 3 credits from the following:	3
ARAB 307	Model Arab League Delegates
ARAB 317	Model Arab League Staff
ARAB 392	Independent Study
HSTR 262H	Islamic Civil: Classical Age

HSTR 264H Islamic Civ. Modrn Era	
Total Hours	3

Minimum Required Grade: C

Chinese Minor

Minor - Chinese (Minor)

College Humanities & Sciences

Degree Specific Credits: 29

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Summary

Lower Core Courses	20
Upper Division Electives	9
Total Hours	29

Lower Core Courses

Rule: Must complete all of the following:

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

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.

Must complete 9 credits from the following:	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

Minimum Required Grade: C-

Classical Civilization

Bachelor of Arts - Classics; Classical Civilization Concentration

College Humanities & Sciences

Degree Specific Credits: 39

Required Cumulative GPA: 2.5

Catalog Year: 2017-2018

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

Classics Core Courses	24
Literature and History	
Languages: Latin or Greek	
Classics Electives	15
Total Hours	39

Classics Core Courses

Rule: Must complete 24 credits from the following subcategories of classes:

Literature and History

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

Minimum Required Grade: C-

Languages

Rule: Student must complete 12 credits in one of the following options:

Option One: Latin

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

Minimum Required Grade: C-

Option Two: Greek

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

Minimum Required Grade: C-

Classics Electives

Note: Classes taken in fulfillment of the Classics Core cannot be counted towards electives.

Select 15 credits of the following: 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

Minimum Required Grade: C-

Classical Civilization Minor Minor - Classical Civilization (Minor)

College Humanities & Sciences

Degree Specific Credits: 24

Required Cumulative GPA: 2.5

Catalog Year: 2017-2018 Summary

Lower Division Core	6
Language Requirements	6
Greek	
Latin	
Degree Electives	12
Total Hours	24

Lower Division Core

Rule: Must complete all of the following:

CLAS 155L	Survey of Greek and Roman Lit	3
CLAS 160L	Classical Mythology	3
Total Hours		6

Minimum Required Grade: C-

Language Requirements

Rule: Must complete 1 of the following language sequences

Option One: Greek

Greek		6
GRK 101	Elementary Greek I	
GRK 102	Elementary Greek II	
Total Hours		6

Minimum Required Grade: C-

Option Two: Latin

Latin		6
LATN 101	Elementary Latin I	
LATN 102	Elementary Latin II	
Total Hours		6

Minimum Required Grade: C-

Degree Electives

Rule: Must complete the following subcategories

12 Total Credits Required

Electives I

Select three of the following: 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

Minimum Required Grade: C-

Electives II

Select one of the following: 3

HSTR 301X	Ancient Greek Social History	
HSTR 302H	Ancient Greece	
HSTR 304H	Ancient Rome	
Total Hours		3

Minimum Required Grade: C-

Classical Languages

Bachelor of Arts - Classics; Classical Languages Concentration

College Humanities & Sciences

Degree Specific Credits: 39

Required Cumulative GPA: 2.5

Catalog Year: 2017-2018

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

Classics Core Courses	24
Literature and History	
Languages: Latin or Greek	
Classical Language Electives	15
Total Hours	39

Classics Core Courses

Rule: Must complete 24 credits from the following subcategories of classes:

Literature and History

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

Minimum Required Grade: C-

Languages

Rule: Student must complete 12 credits in one of the following options:

Option One: Latin

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

Minimum Required Grade: C-

Option Two: Greek

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

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.

Select 15 credits of the following:	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

Minimum Required Grade: C-

French B.A.

Bachelor of Arts - French

College Humanities & Sciences

Degree Specific Credits: 30

Required Cumulative GPA: 2.5

Catalog Year: 2017-2018

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 (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

Upper Division Core	9
Survey Course Electives	9
Degree Electives	6
Literature and/or Culture Courses	6
Total Hours	30

Upper Division Core

Rule: Must 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

Minimum Required Grade: C-

Survey Course Electives

Select three of the following: 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

Minimum Required Grade: C-

Degree Electives

Select at least 6 credits from the following: 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

Minimum Required Grade: C-

Literature and/or Culture Courses

Select 6 credits from the following: 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

Minimum Required Grade: C-

Teaching French Concentration

Extended Major Teaching Field of French

For an endorsement in the extended major teaching field of French, a student must complete the requirements for the B.A. with a major in French including FRCH 421, LING 270S, and MCLG 410. 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.

French qualifies for a single field endorsement. However, there is a limited demand in the majority of Montana high schools for teachers with a single endorsement in French. Students should complete the requirements for a second teaching endorsement (major or minor) in another field in more demand in high schools.

To sign up for this option, you need to contact the Curriculum and Instruction Department. Do not fill out a major/minor form for graduation or the major/minor/concentration section of the major change form. Approvals for this option must come from the Curriculum and Instruction Department.

Tracks will not appear on your UM transcript, diploma, university lists, student data system, or university publication and are used for advising purposes only. You do not fill out a major change for a track.

Individuals interested in teaching in K-12 schools must complete a degree in the content area they want to teach plus the teacher preparation program through the Department of Curriculum and Instruction. Individuals must complete the teaching major/teaching track within that degree program, which may contain different course requirements than the academic major since the sequence of courses is designed to meet state standards. Upon completion of the degree program with the teaching track and the secondary licensure program, one will be eligible for a standard Montana teaching license in this content area.

- Secondary Education Licensure Program (<http://www.coehs.umt.edu/departments/currinst/undergradprograms/seced/default.php>)
- Licensure Degree Requirements (p. 101)

Teaching Licensure Requirements

Note: Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Teaching & Learning (p. 95) in the College of Education and Human Sciences for more information. A major GPA of 2.75 is required to be eligible for student teaching.

Teaching Track

Rule: Must complete 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-

French Minor Minor - French (Minor)

College Humanities & Sciences

Degree Specific Credits: 15

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

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

Upper Division Core	6
Degree Electives	9
Total Hours	15

Upper Division Core

Rule: Must complete all of the following:

FRCH 301	Adv Grammar/Oral Writ Exprsn	3
FRCH 350	French Civ & Culture	3
Total Hours		6

Minimum Required Grade: C-

Degree Electives

Rule: Must complete the following subcategories

9 Total Credits Required

300-level courses

Select two of the following: 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

Minimum Required Grade: C-

400-level courses

Select 3 credits from the following: 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

Minimum Required Grade: C-

Teaching French Concentration

A teaching minor is an academic minor which may contain different course requirements designed to meet state standards. Those interested in teaching in K-12 schools must complete a teaching major in a content

area plus the teacher preparation program through the Department of Curriculum and Instruction. Additional teaching areas can be added through completion of either a teaching major or a teaching minor in that content area.

- Secondary Education Licensure Program (<http://www.coehs.umt.edu/departments/currinst/undergradprograms/seced/default.php>)
- Licensure Degree Requirements (p. 101)

Teaching Licensure Requirements

Note: Individuals completing a teaching minor must also complete a teaching major in another content area. Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Teaching and Learning (p. 95) in the College of Education and Human Sciences for more information. A minor GPA of 2.75 is required to be eligible for student teaching.

Teaching Concentration Requirements

Rule: Must complete all of the following:

LING 270S	Intro to Linguistics	3
MCLG 410	Methods Teaching Foreign Language	3
Total Hours		6

Minimum Required Grade: C-

German B.A. Bachelor of Arts - German

College Humanities & Sciences

Degree Specific Credits: 46

Required Cumulative GPA: 2.5

Catalog Year: 2017-2018

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 (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

Language Core	16
Lower Division Elective	3
Upper Division Core Courses	21-22
German Culture, Film, and Literature Electives	9
Optional Lower-Division Elective	
Total Hours	49-50

Language Core

Rule: Must 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-

Optional Lower-Division Elective

Rule: May take the following course

GRMN 106H	Introduction to German Culture and Civilization	3
Total Hours		3

Minimum Required Grade: C-

Upper Division Core Courses

Rule: Must complete all of the following subcategories

Minimum Required Grade: C-

21-22 Total Credits Required

Subcategory 1

Rule: Must complete all of the following courses

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

Rule: Must complete 1 of the following courses

GRMN 302	German Oral & Written Expression II	3-4
or GRMN 305	Practicum in German Language	
Total Hours		3-4

Minimum Required Grade: C-

Subcategory 3

Rule: Must complete the following courses

GRMN 312	Introduction to German Literature: Drama/Poetry	3
Total Hours		3

Minimum Required Grade: C-

Subcategory 4

Rule: Must complete the following courses

LING 270S	Intro to Linguistics	3
Total Hours		3

Minimum Required Grade: C-

Subcategory 5

Rule: Must complete at least 2 3-credit courses in literature at the 400 level.

Select two of the following:

GRMN 431	German Literature 1760-1832	6
GRMN 441	19th Century German Literature	
GRMN 451	20th Century German Literature to 1945	
GRMN 452	20th Century German Literature Since 1945	
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.

Select three of the following:

GRMN 317L	Introduction to Multicultural Literature in Contemporary Germany	9
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	German Culture 1900-Present	
Total Hours		9

Minimum Required Grade: C-

Optional Lower-Division Elective

GRMN 106H	Introduction to German Culture and Civilization	3
Total Hours		3

Minimum Required Grade: C-

Teaching German Concentration

Extended Major Teaching Field of German

For an endorsement in the extended major teaching field of German, a student must complete the requirements for the B.A. with a major in German which includes LING 270S, plus MCLG 410. Study in a German language country, provided either through the University's Study Abroad Program or an experience considered to be equivalent, also is required. German qualifies for a single field endorsement. However, there is a limited demand in the majority of Montana high schools for teachers with a single endorsement in German. Students are encouraged to complete the requirements for a second teaching endorsement (major or minor) in another field in more demand in high schools.

To sign up for this option, you need to contact 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. Approvals for this option must come from the Curriculum and Instruction Department.

Concentrations will not appear on your UM transcript, diploma, university lists, student data system, or university publication and are used for advising purposes only. You do not fill out a major change for a track.

Individuals interested in teaching in K-12 schools must complete a degree in the content area they want to teach plus the teacher preparation program through the Department of Curriculum and Instruction. Individuals must complete the teaching major/teaching track within that degree program, which may contain different course requirements than the academic major since the sequence of courses is designed to meet state standards. Upon completion of the degree program with the teaching track and the secondary licensure program, one will be eligible for a standard Montana teaching license in this content area.

- Secondary Education Licensure Program (<http://www.coehs.umt.edu/departments/currinst/undergradprograms/seced/default.php>)
- Licensure Degree Requirements (p. 101)

Teaching Licensure Requirements

Note: Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Teaching and Learning (p. 95) in the College of Education and Human Sciences for more information. A major GPA of 2.75 is required to be eligible for student teaching.

Teaching Concentration

Rule: Must complete the following courses

LING 270S	Intro to Linguistics	3
MCLG 410	Methods Teaching Foreign Language	3
Total Hours		6

Minimum Required Grade: C-

German Minor

Minor - German (Minor)

College Humanities & Sciences

Degree Specific Credits: 34

Required Cumulative GPA: 2.5

Catalog Year: 2017-2018

Summary

Language Core	16
Lower Division Elective	3
Upper Division Core Courses	12-13
German Culture, Film, and Literature Electives	3
Total Hours	34-35

Language Core

Rule: Must 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-

Lower Division Elective

Rule: Must take the following course

GRMN 106H	Introduction to German Culture and Civilization	3
Total Hours		3

Minimum Required Grade: C-

Upper Division Core Courses

Rule: Must complete all of the following subcategories

Note: Native or near-native speakers of German must substitute 2 400-level literature courses for GRMN 301 and GRMN 302.

Minimum Required Grade: C-

12-13 Total Credits Required

Subcategory 1

Rule: Must complete all of the following courses

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

Rule: Must complete 1 of the following courses

GRMN 302	German Oral & Written Expression II	3-4
or GRMN 305	Practicum in German Language	
Total Hours		3-4

Minimum Required Grade: C-

Subcategory 3

Rule: Must complete the following courses

GRMN 312	Introduction to German Literature: Drama/Poetry	3
Total Hours		3

Minimum Required Grade: C-

German Culture, Film, and Literature Electives

Select one of the following: 3

GRMN 317L	Introduction to Multicultural Literature in Contemporary Germany	3
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	German Culture 1900-Present	

Total Hours 3

Minimum Required Grade: C-

Teaching German Concentration

A teaching minor is an academic minor which may contain different course requirements designed to meet state standards. Those interested in teaching in K-12 schools must complete a teaching major in a content area plus the teacher preparation program through the Department of Curriculum and Instruction. Additional teaching areas can be added through completion of either a teaching major or a teaching minor in that content area.

- Secondary Education Licensure Program (<http://www.coehs.umt.edu/departments/currinst/undergradprograms/seced/default.php>)
- Licensure Degree Requirements (p. 101)

To sign up for this option, you need to contact the Teaching and Learning Department. Do not fill out a minor form for graduation or the minor section of the major change form. Approvals for this option must come from the Curriculum and Instruction Department.

Teaching Licensure Requirements

Note: Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Teaching and Learning (p. 95) in the College of Education and Human Sciences for more information. Individuals completing a teaching minor must also complete a teaching major in another content area. A minor GPA of 2.75 is required to be eligible for student teaching.

Teaching Concentration Requirements

Rule: Must complete both of the following

LING 270S	Intro to Linguistics	3
MCLG 410	Methods Teaching Foreign Language	3

Total Hours 6

Minimum Required Grade: C-

Greek Minor

Minor - Greek (Minor)

College Humanities & Sciences

Degree Specific Credits: 21

Required Cumulative GPA: 2.5

Catalog Year: 2017-2018

Summary

Required Lower Division Courses	12
Required Upper Division Courses	9
Total Hours	21

Required Lower Division Courses

Rule: Must 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

Minimum Required Grade: C-

Required Upper Division Courses

Select 9 credits from the following: 9

GRK 300	Major Greek Writers	
GRK 391	Special Topics	
GRK 392	Independent Study	
GRK 492	Independent Study	

Total Hours 9

Minimum Required Grade: C-

Japanese B.A.

Bachelor of Arts - Japanese

College Humanities & Sciences

Degree Specific Credits: 55

Required Cumulative GPA: 2.5

Catalog Year: 2017-2018

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 (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

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

Lower Division Core Courses

Rule: Complete the following subcategories of courses:

29 Total Credits Required

Language Core

Rule: Must complete all of the following courses:

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

Minimum Required Grade: C-

Culture and Civilization Core

Rule: Must complete the following course:

JPNS 150H	Japanese Cult & Civiliz	3
Total Hours		3

Minimum Required Grade: C-

East Asian Studies

Note: Student must complete at least 2 East Asian studies or history courses on Japan or East Asia at any level that are not taught in the Modern and Classical Languages and Literature department for a total of 6 additional credits.

Upper Division Core Courses

Rule: Must complete all of the following courses:

Note: Either JPNS 412 or JPNS 415 may be taken to complete the 14 credits. JPNS 411 is repeatable once.

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

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.

Select 12 credits from the following:	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

Minimum Required Grade: C-

Japanese Minor

Minor - Japanese (Minor)

College Humanities & Sciences

Degree Specific Credits: 32

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Summary

Lower Division Core Courses	23
Upper Division Elective Courses	9
Total Hours	32

Lower Division Core Courses

Rule: Must 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

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.

Select 9 credits from the following:	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

Minimum Required Grade: C-

Latin American Studies Minor

Minor - Latin American Studies (Minor)

College Humanities & Sciences

Degree Specific Credits: 30

Required Cumulative GPA: 2.5

Catalog Year: 2017-2018

Summary

Required Lower Division Courses	15
Minor Electives	15
Total Hours	30

Required Lower Division Courses

Rule: Must complete all of the following courses:

MCLG 100H	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

Minimum Required Grade: C-

Minor Electives

Note: SPNS 494 may count when topic is related to Latin American literature such as Latin American drama, poetry, novel, short story, Argentinian literature, or 19th Century Latin American Literature.

Select 15 credits from the following:	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	Contemp Latin Amer Lit
SPNS 432	Latin American Literature
SPNS 494	Seminar
Total Hours	15

Minimum Required Grade: C-

Latin B.A.

Bachelor of Arts - Classics; Latin Concentration

College Humanities & Sciences

Degree Specific Credits: 39

Required Cumulative GPA: 2.5

Catalog Year: 2017-2018

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umd.edu/academics/general-education-requirements>) of the catalog.

Summary

Classics Core Courses	24
Literature and History	
Languages	
Advanced Latin Language	9
Latin Major Electives	6
Total Hours	39

Classics Core Courses

Rule: Must Complete 24 credits from the following subcategories of classes:

Literature and History

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

Minimum Required Grade: C-

Languages

Must Complete all 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

Minimum Required Grade: C-

Advanced Latin Language

Complete an additional 9 credits in advanced Latin	9	
LATN 311	Major Latin Authors	
LATN 391	Special Topics	
LATN 392	Independent Study	
LATN 492	Independent Study	
Total Hours	9	

Latin Major Electives

Select 6 credits from the following:	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	

Minimum Required Grade: C-

Teaching Latin Track

Individuals interested in teaching in K-12 schools must complete a degree in the content area they want to teach plus the teacher preparation program through the Department of Teaching and Learning. Individuals must complete the teaching major/teaching track within that degree

program, which may contain different course requirements than the academic major since the sequence of courses is designed to meet state standards. Upon completion of the degree program with the teaching concentration and the secondary licensure program, one will be eligible for a standard Montana teaching license in this content area.

Note: Students must gain admission to Teacher Education Program. An overall minimum grade point average of 3.0 is required for upper division work. Students must meet the requirements for teaching licensure.

- Secondary Education Licensure Program (<http://www.coehs.umt.edu/departments/currinst/undergradprograms/seced/default.php>)
- Licensure Degree Requirements (p. 101)

Latin Teaching Core

Students completing the Latin Teaching Track are required to complete the following courses:

ARTH 407	Roman and Early Christian Art	3
MCLG 410	Methods Teaching Foreign Language	3
Total Hours		6

Latin Minor

Minor - Latin (Minor)

College Humanities & Sciences

Degree Specific Credits: 21-24

Required Cumulative GPA: 2.5

Catalog Year: 2017-2018

Summary

Required Lower Division Courses	12
Required Upper Division Courses	9
Latin Teaching Minor Track (add three credits if you are completing this advising track)	3
Total Hours	24

Required Lower Division Courses

Rule: Must 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

Minimum Required Grade: C-

Required Upper Division Courses

Select 9 credits from the following:	9	
LATN 311	Major Latin Authors	
LATN 391	Special Topics	
LATN 392	Independent Study	

LATN 492	Independent Study	
Total Hours		9

Minimum Required Grade: C-

Teaching Latin Track

A teaching minor is an academic minor which may contain different course requirements designed to meet state standards. Those interested in teaching in K-12 schools must complete a teaching major in a content area plus the teacher preparation program through the Department of Teaching and Learning. Additional teaching areas can be added through completion of either a teaching major or a teaching minor in that content area.

- Secondary Education Licensure Program (<http://www.coehs.umt.edu/departments/currinst/undergradprograms/seced/default.php>)
- Licensure Degree Requirements (p. 101)

The term 'minor' for this teaching option refers to courses that need to be completed. To sign up for this option, you need to contact the Teaching and Learning Department. Do not fill out a minor form for graduation or the minor section of the major change form. Approvals for this option must come from the Teaching and Learning Department.

Teaching Licensure Requirements

Note: Individuals completing a teaching minor must also complete a teaching major in another content area. Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Teaching and Learning (p. 95) in the College of Education and Human Sciences for more information. A minor GPA of 2.75 is required to be eligible for student teaching.

Teaching Methods Course

Rule: Complete the following course.

MCLG 410	Methods Teaching Foreign Language	3
Total Hours		3

Minimum Required Grade: C-

Russian B.A.

Bachelor of Arts - Russian

College Humanities & Sciences

Degree Specific Credits: 48

Required Cumulative GPA: 2.5

Catalog Year: 2017-2018

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 (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

Lower Division Core Courses	19
Language	
Culture	
Upper Division Core Courses	27
Expression	
Translation	
Language	
History	
Total Hours	46

Lower Division Core Courses

Rule: Complete the following subcategories of courses

21 Total Credits Required

Language

Rule: Must 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

Minimum Required Grade: C-

Culture

Rule: Must complete the following course

RUSS 105H	Intro to Russian Culture	3
Total Hours		3

Minimum Required Grade: C-

Upper Division Core Courses

Rule: Must complete the following subcategories

Note: Student must complete at least 27 credits of upper-division work in Russian courses and electives, 15 credits of which must be in the target language.

27 Total Credits Required

Translation

Note: RUSS 494 must be taken for 3 credits and will fulfill the upper division writing requirement.

Select two of the following:	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

Minimum Required Grade: C-

Language

Select three of the following: 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

Minimum Required Grade: C-

History

Select one of the following: 3

HSTR 357	Russia to 1881	
HSTR 358	Russia Since 1881	
Total Hours		3

Minimum Required Grade: C-

Teaching Russian Concentration

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 Department. Individuals must complete the teaching major/teaching track within that degree program, which may contain different course requirements than the academic major since the sequence of courses is designed to meet state standards. Upon completion of the degree program with the teaching track and the secondary licensure program, one will be eligible for a standard Montana teaching license in this content area.

- Secondary Education Licensure Program (<http://www.coehs.umt.edu/departments/currinst/undergradprograms/seced/default.php>)
- Licensure Degree Requirements (p. 101)

To sign up for this concentration, you 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. Approvals for this option must come from the Teaching and Learning Department.

Concentrations 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.

Teaching Licensure Requirements

Note: Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Teaching and Learning (p. 95) in the College of Education and Human Sciences for more information. A major GPA of 2.75 is required to be eligible for student teaching. This major does not qualify as a single field endorsement. Individuals must complete a second teaching major or minor in another content area.

Teaching Concentration Course

Rule: Must complete the following course

MCLG 410	Methods Teaching Foreign Language	3
Total Hours		3

Minimum Required Grade: C-

Russian Minor

College Humanities & Sciences

Degree Specific Credits: 28

Required Cumulative GPA: 2.5

Catalog Year: 2017-2018

Summary

Lower Division Core Requirements	16
Upper Division Credits	12
Total Hours	28

Lower Division Core Requirements

Rule: Must complete all four courses or have equivalent 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

Minimum Required Grade: C

Upper Division Credits

Rule: Must complete 12 upper division credits in Russian-related courses taught by MCLL faculty or equivalent

Minimum Required Grade: C-

12 Total Credits Required

Teaching Russian Concentration

A teaching minor is an academic minor which may contain different course requirements designed to meet state standards. Those interested in teaching in K-12 schools must complete a teaching major in a content area plus the teacher preparation program through the Department of Teaching and Learning. Additional teaching areas can be added through completion of either a teaching major or a teaching minor in that content area.

- Secondary Education Licensure Program (<http://www.coehs.umt.edu/departments/currinst/undergradprograms/seced/default.php>)
- Licensure Degree Requirements (p. 101)

The term 'minor' for this teaching option refers to courses that need to be completed. To sign up for this option, you need to contact the Teaching and Learning Department. Do not fill out a minor form for graduation or

the minor section of the major change form. Approvals for this option must come from the Teaching and Learning Department.

Teaching Licensure Requirements

Note: Individuals completing a teaching minor must also complete a teaching major in another content area. Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Teaching and Learning (p. 95) in the College of Education and Human Sciences for more information. A minor GPA of 2.75 is required to be eligible for student teaching.

Teaching Methods Course

Rule: Complete the following course.

MCLG 410	Methods Teaching Foreign Language	3
Total Hours		3

Minimum Required Grade: C

Russian Studies Minor Minor - Russian Studies (Minor)

College Humanities & Sciences

Degree Specific Credits: 30

Required Cumulative GPA: 2.5

Catalog Year: 2017-2018

Summary

Lower Division Core Courses	19
Language	
Culture	
Degree Electives	9
History	
Russian Electives	
Total Hours	28

Lower Division Core Courses

Rule: Must complete the following subcategories

21 Total Credits Required

Language

Rule: Must 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

Minimum Required Grade: C-

Degree Electives

Rule: Must complete the following subcategories

9 Total Credits Required

History

Select one of the following:

HSTR 357	Russia to 1881	3
HSTR 358	Russia Since 1881	

Total Hours	3
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Minimum Required Grade: C-

Russian Electives

Rule: Must complete 6 credits of upper-division coursework

Note: 3 of the 6 credits must be taken in the MCLL department and 3 credits from a third department/discipline.

Spanish B.A. Bachelor of Arts - Spanish

College Humanities & Sciences

Degree Specific Credits: 49

Required Cumulative GPA: 2.5

Catalog Year: 2017-2018

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 (<http://catalog.umd.edu/academics/general-education-requirements>) of the catalog.

Summary

Lower Division Core Courses	16
Upper Division Core Courses	9
Additional Upper Division Spanish Electives	21
Upper Division Writing	3
Total Hours	49

Lower Division Core Courses

Rule: Must 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

Minimum Required Grade: C-

Upper Division Core Courses

Rule: Must complete all of the following courses

Note: The sequential order of the following required courses must be followed:

1. SPNS 326 and SPNS 331 must be taken before any 400-level literature course
2. SPNS 301 must be taken before SPNS 408

SPNS 301	Spanish: Oral and Written Expr	3
SPNS 326	Contemporary Spanish Lit	3
SPNS 331	Contemp Latin Amer Lit	3
Total Hours		9

Minimum Required Grade: C-

Additional Upper Division Spanish Electives

Rule: Must complete 21 credits of upper-division courses in Spanish.

The remaining 12 credits could be completed by taking any combination of the upper-division elective courses.

Upper Division Writing

Rule: Must complete the following course

Note: This course fulfills the upper division writing requirement.

MCLG 315	Major Hispanic Authors	3
Total Hours		3

Minimum Required Grade: C-

Teaching Spanish Concentration

Individuals interested in teaching in K-12 schools must complete a degree in the content area they want to teach (Teaching Spanish Concentration) plus the teacher preparation program through the Department of Teaching and Learning. Individuals must complete the Teaching Spanish Concentration within that degree program, which may contain different course requirements than the Spanish major since the sequence of courses is designed to meet state standards. Upon completion of the degree program with the teaching track and the secondary licensure program, one will be eligible for a standard Montana teaching license in this content area.

- Secondary Education Licensure Program (<http://www.coehs.umt.edu/departments/currinst/undergradprograms/seced/default.php>)
- Licensure Degree Requirements (p. 101)

Teaching Licensure Requirements

Note: Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Teaching and Learning (p. 95) 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.

Extended Major Teaching Field of Spanish

For an endorsement in the extended major teaching field of Spanish, a student must complete the requirements for the B.A. with a major in Spanish including SPNS 301, 305, 400, 408 (SPAN 301, 302, 405, 408) and MCLG 410. Study in a Spanish language country, provided either through the University's Study Abroad Program or an experience considered to be equivalent, also is required. Spanish qualifies for a single field endorsement. However, there is a limited demand in the majority of Montana high schools for teachers with a single endorsement in Spanish. Students are encouraged to complete the requirements for a second teaching endorsement (major or minor) in another field in more demand in high schools.

To sign up for this option, you need to contact the 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. Approvals for this option 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.

Teaching Methods Course

Rule: Must complete the following course

LING 270S	Intro to Linguistics	3
MCLG 410	Methods Teaching Foreign Language	3
Total Hours		6

Minimum Required Grade: C-

Spanish Minor Minor - Spanish (Minor)

College Humanities & Sciences

Degree Specific Credits: 36

Required Cumulative GPA: 2.5

Catalog Year: 2017-2018

Summary

Lower Division Core	18
Upper Division Core	6
Expression	
Literature	
Upper Division Electives	12
Literature and Linguistics	
Additional Electives	
Total Hours	36

Lower Division Core

Rule: Must 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

Minimum Required Grade: C-

Upper Division Core

Rule: Must complete all of the following subcategories

6 Total Credits Required

Expression

Rule: Must complete the following course

SPNS 301	Spanish: Oral and Written Expr	3
Total Hours		3

Minimum Required Grade: C-

Literature

Rule: Must complete 1 of the following courses

SPNS 326	Contemporary Spanish Lit	3
or SPNS 331	Contemp Latin Amer Lit	
Total Hours		3

Minimum Required Grade: C-

Upper Division Electives

Rule: Must complete the following subcategories

12 Total Credits Required

Literature and Linguistics

Select one of the following: 3

SPNS 400	Spanish: Applied Linguistics	
SPNS 432	Latin American Literature	
SPNS 465	Spanish Lit:Renaiss/Goldn Age	
SPNS 466	Spanish Lit:Modern & Contemp	
Total Hours		3

Minimum Required Grade: C-

Additional Electives

Rule: Must complete 9 credits of additional upper division SPNS electives

Teaching Spanish Concentration

A teaching minor is an academic minor which may contain different course requirements designed to meet state standards. Those interested in teaching in K-12 schools must complete a teaching major in a content area plus the teacher preparation program through the Department of Teaching and Learning. Additional teaching areas can be added through completion of either a teaching major or a teaching minor in that content area.

- Secondary Education Licensure Program (<http://www.coehs.umt.edu/departments/currinst/undergradprograms/seced/default.php>)
- Licensure Degree Requirements (p. 101)

Minor Teaching Field of Spanish

For an endorsement in the minor teaching field of Spanish, a student must complete

SPNS 101	Elementary Spanish I (or equivalent)	4
SPNS 102	Elementary Spanish II (or equivalent)	4
SPNS 201	Intermediate Spanish I (or equivalent)	4
SPNS 202	Intermediate Spanish II (or equivalent)	4
SPNS 301	Spanish: Oral and Written Expr	3
SPNS 305	Spanish Phonetics	3
SPNS 400	Spanish: Applied Linguistics	3
Select one of the following:		3
SPNS 326	Contemporary Spanish Lit	
SPNS 331	Contemp Latin Amer Lit	
MCLG 410	Methods Teaching Foreign Language	3

Study in a Spanish-language country, provided either through the University's Study Abroad Program or an experience considered to be equivalent, also is required.

The term 'minor' for this teaching option refers to courses that need to be completed. To sign up for this option, you need to contact the Teaching and Learning Department. Do not fill out a minor form for graduation or the minor section of the major change form. Approvals for this option must come from the Teaching and Learning Department.

Teaching Licensure Requirements

Note: Individuals completing a teaching minor must also complete a teaching major in another content area. Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Teaching and Learning (p. 95) in the College of Education and Human Sciences for more information. A minor GPA of 2.75 is required to be eligible for student teaching.

Teaching Methods Course

Rule: Complete the following course

MCLG 410	Methods Teaching Foreign Language	3
Total Hours		3

Minimum Required Grade: C-

Native American Studies

Theodore Van Alst, 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. (p. 303)

Undergraduate Minors

- Native American Studies (p. 304)

Undergraduates Certificate

- Language Rejuvenation and Maintenance Certificate of Art (p. 303)

Language Rejuvenation and Maintenance Certificate

Certificate of Art - Language Rejuvenation & Maint

College Humanities & Sciences

Degree Specific Credits: 18

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Summar

Core Courses	9
Degree Electives	9
Total Hours	18

Core Courses

Rule: All courses are required

ANTY 476	Methods for Native Languages	3
CSD 210	Speech & Lang Devel	3

NASX 201X	Indian Cultr Exprssd Thru Lang	3
Total Hours		9

Minimum Required Grade: C-

Degree Electives

Note: ANTY 476 may be repeated for elective credits.

Select a minimum of 9 credits from the following: 9

ANTY 326E	Indigenous Peoples & the Ethics of Development
ANTY 423	Culture and Identity
NASX 141	Elementary Blackfoot I
NASX 235X	Oral/Written Trads Native Amer
PSCI 411	Nonprofit Grant Writing
PSCI 412	Nonprofit Fundraising

Total Hours		9
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Minimum Required Grade: C-

Native American Studies B.A.

Bachelor of Arts - Native American Studies

College Humanities & Sciences

Degree Specific Credits: 39

Required Cumulative GPA: 2.5

Catalog Year: 2017-2018

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umd.edu/academics/general-education-requirements>) of the catalog.

Summary

Lower Division Core Courses	12
Upper Division Core Courses	18
Fundamentals	
Indigenous	
History	
Elective Courses	9
Total Hours	39

Lower Division Core Courses

Rule: Must 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
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Minimum Required Grade: C-

Upper Division Core Courses**Rule:** Must complete the following subcategories

18 Total Credits Required

Fundamentals**Rule:** Must complete all of the following courses

NASX 303E	Ecol Persp in Nat Amer Trad	3
NASX 304E	Native American Beliefs/Philos	3
NASX 494	Seminar/Workshop	3
Total Hours		9

Minimum Required Grade: C-

Indigenous**Rule:** Must complete 1 of the following courses

Select one of the following:		3
NASX 260X	Indig Community Developmnt	
NASX 306X	Contemp Global Iss Indg People	
NASX 475	Tribal Sovereignty	
Total Hours		3

Minimum Required Grade: C-

History

Select two of the following:		6
NASX 464	Hist Amer Indian Affrs to 1776	
NASX 465	Hist Amer Indian Affrs 10 Cent	
NASX 466	Hist of Indian Affrs from 1890	
Total Hours		6

Minimum Required Grade: C-

Elective Courses

Select 9 credits from the following:		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 291	Special Topics	
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 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

Minimum Required Grade: C-

**Native American Studies Minor
Minor - Native American Studies (Minor)****College Humanities & Sciences****Degree Specific Credits:** 21**Required Cumulative GPA:** 2.5**Catalog Year: 2017-2018
Summary**

Core Courses	12
Degree Electives	9
Total Hours	21

Core Courses**Rule:** Must complete all of the following courses

NASX 105H	Intro Native Amer Studies	3
NASX 235X	Oral/Written Tradts Native Amer	3
NASX 303E	Ecol Persp in Nat Amer Trad	3
NASX 304E	Native American Beliefs/Philos	3
Total Hours		12

Minimum Required Grade: C-

Degree Electives

Select 9 credits from the following:		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 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	Hist Amer Indian Affrs 10 Cent
NASX 466	Hist of Indian Affrs from 1890
NASX 475	Tribal Sovereignty
NASX 488	Stds in Native Amer Autobio
NASX 491	Special Topics
NASX 499	Senior Capstone/Thesis
Total Hours	9

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.

Bachelor of Arts and Master of Arts degrees are offered. More information is available online at the Philosophy Department website (<http://hs.umt.edu/philosophy>).

Undergraduate

- Philosophy B.A. (p. 306)

Undergraduate Minors

- Philosophy (p. 307)

Undergraduate Certificates

- Environmental Ethics (p. 305)

Environmental Ethics Certificate

CERTIFICATE IN ENVIRONMENTAL ETHICS

College of Humanities & Sciences

Degree Specifics: 12

Required Cumulative GPA: 1.7

Catalog Year: 2017-2018

Summary

Required Courses	6
Elective Courses	6
Total Hours	12

Required Courses

Rule: 6 Credits

Note: PHL 311 can substitute for PHL 422 when PHL 311's course title is "Philosophy and the Environmental Crisis"

Take these two requirements

PHL 112E	Intro Ethics and Environment
PHL 422	Environmental Philosophy
Total Hours	0

Minimum Required Grade: C-

Elective Courses

Rule: Choose two of the following

Note: ENST 391 only counts when it is titled "Earth Ethics: Moral Dimensions of Environmental Issues."

At least one must be at the 400 or 500 level	6
PHL 210E	Moral Philosophy
ENST 225	Community & Environment
ENST 230H	Nature and Society
NRSM 265	Elements of Ecological Restora
NASX 303E	Ecol Persp in Nat Amer Trad
ENST 367	Environmental Politics & Policies
PHL 323	Ethics of Climate Change
NRSM 370S	Wildland Conserv Pol/Govrnance
NRSM 373	Wilderness and Civilization
NRSM 389E	Ethics Forestry & Conservation
ENST 391	Special Topics/Experimental Courses (Only counts when it is titled "Earth Ethics: Moral Dimensions of Environmental Issues")
NRSM 426	Climate and Society
ENST 430	Culture & Agriculture
PSCI 442	Environmental Policy
NRSM 449E	Climate Change Ethics/Policy
ENST 480	Food, Agriculture, Environment
ENST 487	Globalization, Justice & Environment
PTRM 482	Wilderness & Protctd Area Mgt
ENST 489S	Environmental Justice Issues & Solutions
PHL 504	Topics in Environ Philosophy
PHL 505	Issues in the Anthropocene
PTRM 582	Concept of Wilderness & PA
PHL 591	Special Topics
Total Hours	6

Minimum Required Grade: C-

Philosophy B.A.

Bachelor of Arts - Philosophy

College Humanities & Sciences

Degree Specific Credits: 33

Required Cumulative GPA: 1.7

Catalog Year: 2017-2018

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

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
Modern and Classical Language Requirement	
Total Hours	33

Philosophy Lower-Division Core

Rule: All courses are required.

Note:

- General Education fulfillment through the lower-division core: PHL 210E fulfills the "approved writing course" and "Ethics & Human Values."
- Both PHL 261Y and PHL 262Y fulfill "Democracy and Citizenship".

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

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.

Minimum Required Grade: C-

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).

Select one of the following:	3
PHL 462	Early Modern Philosophy
PHL 464	Kant
PHL 465	Plato
PHL 466	Aristotle
Total Hours	3

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).

Select one from the following:	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	Hist Moral and Political Phil
PHL 450	Contemp Moral/Political Theory
PHL 455	Phil of Society and Culture
Total Hours	3

Minimum Required Grade: C-

III. Continental Philosophy

Rule: Complete one course (3 credits).

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).

PHL 467	19th Century Continental Phil	3
or PHL 468	20th Century Continental Phil	
Total Hours		3

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).

Select one of the following:	3
PHL 405	20th Century Analytic Phil
PHL 406	Contemp Issues Analytic Phil
PHL 445	Central Issues Phil of Science
Total Hours	3

Minimum Required Grade: C-

Required Upper-Division Electives in Philosophy

Note: Any course taken for an Upper-Division Core area would not also apply to the Upper-Division Elective requirement.

Select two of the following: 6

PHL 301	Knowledge and Reality
PHL 311	The Good, Right, Beautiful
PHL 316	Historical Figures in Phil
PHL 321E	Philosophy & Biomedical Ethics
PHL 323	Ethics of Climate Change
PHL 351	Philosophy and Feminism
PHL 363H	Ancient Greek and Roman Philosophy
PHL 370	Philosophy of Religion
PHL 390	Research
PHL 391	Special Topics
PHL 392	Independent Study
PHL 394	Seminar
PHL 398	Internship
PHL 405	20th Century Analytic Phil
PHL 406	Contemp Issues Analytic Phil
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 Phil of Science
PHL 449	Hist Moral and Political Phil
PHL 450	Contemp Moral/Political Theory
PHL 455	Phil of Society and Culture
PHL 462	Early Modern Philosophy
PHL 464	Kant
PHL 465	Plato
PHL 466	Aristotle
PHL 467	19th Century Continental Phil
PHL 468	20th Century Continental Phil
PHL 490	Research
PHL 491	Special Topics
PHL 492	Independent Study
PHL 494	Seminar
PHL 498	Internship

Total Hours 6

Minimum Required Grade: C-

Senior Seminar

Rule: Students must complete PHL 499. 3 credits.

Note: This capstone course is normally taken during the spring semester of senior year.

General Education fulfillment: PHL 499 fulfills the "Upper Division Writing Expectation for the major"

PHL 499	Senior Seminar (normally taken during the spring semester of senior year)	3
Total Hours		3

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 Minor - Philosophy (Minor)

College Humanities & Sciences

Degree Specific Credits: 18

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Note: Students must complete a minimum of 18 credits in philosophy; at least 6 credits must be in courses numbered 300 and higher.

Summary

Lower Division Core	12
Core Area Requirement	6
History	
Value Theory	
Continental Philosophy	
Analytic Philosophy	
Total Hours	18

Lower Division Core

Rule: Must complete all of the following courses:

Note:

- General Education fulfillment through the lower-division core: PHL 210E fulfills the "approved writing course" and "Ethics & Human Values."
- Both PHL 261Y and PHL 262Y fulfill "Democracy and Citizenship".

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

Minimum Required Grade: C-

Core Area Requirement

Rule: Students must complete at least one course in two of the four core areas. Six (6) credits required. Both must be upper division.

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).

Minimum Required Grade: C-

History

Select at least one of the following: 3

PHL 462	Early Modern Philosophy	
PHL 464	Kant	
PHL 465	Plato	
PHL 466	Aristotle	

Total Hours 3

Minimum Required Grade: C-

Value Theory

Select one from the following: 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	Hist Moral and Political Phil	
PHL 450	Contemp Moral/Political Theory	
PHL 455	Phil of Society and Culture	

Total Hours 3

Minimum Required Grade: C-

Continental Philosophy

PHL 467	19th Century Continental Phil	3
or PHL 468	20th Century Continental Phil	

Total Hours 3

Minimum Required Grade: C-

Analytic Philosophy

Select at least one of the following: 3

PHL 405	20th Century Analytic Phil	
PHL 406	Contemp Issues Analytic Phil	
PHL 445	Central Issues Phil of Science	

Total Hours 3

Minimum Required Grade: C-

Physics and Astronomy Department

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. (p. 309)
- Physics B.A., Astronomy Concentration (p. 310)
- Physics B.A., Computational Physics Concentration (p. 314)
- Physics B.A., Teaching Broadfield Science Concentration (p. 312)

Undergraduate Minors

- Astronomy (p. 308)
- Physics (p. 315)

Astronomy Minor

Minor - Astronomy (Minor)

College Humanities & Sciences

Degree Specific Credits: 25

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Note: Mathematics prerequisites for the Astronomy minor are M 171, M 172, and M 273

Summary

Lower Division Physics Courses	10
College Physics	
Physics with Calculus	
Lower Division Astronomy Courses	6-7
Core Course	
Core Elective	

Electives	9
Total Hours	25-26

Lower Division Physics Courses

Note: The Physics with Calculus series (PHSX 215N - PHSX 218N) is strongly recommended.

Select one of the following sequences: 10

Algebra- and Trigonometry-based:

PHSX 205N College Physics I
& PHSX 206N and College Physics I Laboratory

PHSX 207N College Physics II
& PHSX 208N and College Physics II Laboratory

Calculus-based:

PHSX 215N Fund of Physics w/Calc I
& PHSX 216N and Physics Laboratory I w/Calc

PHSX 217N Fund of Physics w/Calc II
& PHSX 218N and Physics Laboratory II w/Calc

Total Hours 10

Minimum Required Grade: C-

Lower Division Astronomy Courses

Rule: Complete the following subcategories of courses

6-7 Total Credits Required

Core Course

Rule: Complete all of the following courses

ASTR 131N Planetary Astronomy 3

Total Hours 3

Minimum Required Grade: C-

Core Elective

Rule: Choose 1 of the following courses

ASTR 132N Stars, Galaxies, and the Universe 3-4
or ASTR 142N The Evolving Universe

Total Hours 3-4

Minimum Required Grade: C-

Electives

Select three of the following: 9

ASTR 351 Planetary Science

ASTR 353 Galactic Astrophysics

ASTR 362 Observational Astronomy

ASTR 363 Stellar Astr & Astrophys I

Total Hours 9

Minimum Required Grade: C-

Physics

Bachelor of Arts - Physics

College Humanities & Sciences

Degree Specific Credits: 68

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umd.edu/academics/general-education-requirements>) of the catalog.

Summary

Lower Division Physics	10
College Physics	
Physics with Calculus	
Upper Division Physics	30
Physics Electives	6
Math Requirements	16
Computer Science Requirements	3
Advanced College Writing Requirement	3
Total Hours	68

Lower Division Physics

Rule: Must complete all of the courses in one of the two sequences:

Physics

Select one of the following Physics sequences: 10

Algebra- and Trigonometry-based:

PHSX 205N College Physics I
& PHSX 206N and College Physics I Laboratory

PHSX 207N College Physics II
& PHSX 208N and College Physics II Laboratory

Calculus-based (strongly recommended):

PHSX 215N Fund of Physics w/Calc I
& PHSX 216N and Physics Laboratory I w/Calc

PHSX 217N Fund of Physics w/Calc II
& PHSX 218N and Physics Laboratory II w/Calc

Total Hours 10

Minimum Required Grade: C-

Upper Division Physics

Rule: Complete 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
Choose any 2 courses from the following		6
PHSX 425	Electricity & Magnetism II	
PHSX 446	Thermodyn & Stat Mech	
PHSX 462	Quantum Mechanics II	
Total Hours		30

Minimum Required Grade: C-

Physics Electives

Note: Other PHSX courses may be substituted with adviser approval.

Select two courses from the following list:		6
PHSX 141N	Einstein's Relativity or ASTR 142 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

Minimum Required Grade: C-

Math Requirements

Rule: Complete all of the following courses

Note: M 317, M 412, and M 418 are recommended as well

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

Minimum Required Grade: C-

Computer Science Requirements

Select one of the following:		3
CSCI 100	Intro to Programming	
CSCI 135	Fund of Computer Science I	
CSCI 250	Computer Mdlng/Science Majors (strongly recommended)	
PHSX 333	Computational Physics (strongly recommended)	
Total Hours		3

Minimum Required Grade: C-

Advanced College Writing Requirement

Rule: Must take the following course

Note: May substitute another advanced writing course as approved by the department chair.

PHSX 330	Communicating Physics	3
Total Hours		3

Minimum Required Grade: C-

Teaching Physics Track

Individuals interested in teaching in K-12 schools must complete a degree in the content area they want to teach plus the teacher preparation program through the Department of Teaching and Learning. Individuals must complete the teaching major/teaching track within that degree program, which may contain different course requirements than the academic major since the sequence of courses is designed to meet state standards. Upon completion of the degree program with the teaching track and the secondary licensure program, one will be eligible for a standard Montana teaching license in this content area.

- Secondary Education Licensure Program (<http://www.coehs.umt.edu/departments/currinst/undergradprograms/seced/default.php>)
- Licensure Degree Requirements (p. 101)

To sign up for this option, you 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. Approvals for this option 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.

Teaching Licensure Requirements

Note: Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Teaching and Learning (p. 95) in the College of Education and Human Sciences for more information. A major GPA of 2.75 is required to be eligible for student teaching. This major does not qualify as a single field endorsement. Individuals must complete a second teaching major or minor in another content area.

Teaching Licensure Course

Rule: Must complete the following course

Note: The EDU 497 course number is used for multiple courses. Students should register for EDU 497 Methods: 5-12 Science.

EDU 497	Teaching and Assessing	4
Total Hours		4

Minimum Required Grade: C-

Physics - Astronomy

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 Humanities & Sciences

Degree Specific Credits: 69

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

Lower Division Physics Core	10
College Physics	
Physics with Calculus	
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

Lower Division Physics Core

Rule: Must complete all of the courses in one of the two sequences:

10 Total Credits Required

Physics

Select one of the following Physics sequences: 10

Algebra- and Trigonometry-based:

PHSX 205N College Physics I
& PHSX 206N and College Physics I Laboratory

PHSX 207N College Physics II
& PHSX 208N and College Physics II Laboratory

Calculus-based (strongly recommended):

PHSX 215N Fund of Physics w/Calc I
& PHSX 216N and Physics Laboratory I w/Calc

PHSX 217N Fund of Physics w/Calc II
& PHSX 218N and Physics Laboratory II w/Calc

Total Hours 10

Minimum Required Grade: C-

Lower Division Astronomy Core

Rule: Must complete all of the courses in one of the two options:

4 Total Credits Required

Astronomy Core: Option 1

Rule: May complete all of the following courses

ASTR 132N	Stars, Galaxies, and the Universe	3
ASTR 135N	Stars, Galaxies, and the Universe Lab	1
Total Hours		4

Minimum Required Grade: C-

Astronomy Core: Option 2

Rule: May complete the following course

ASTR 142N	The Evolving Universe	4
Total Hours		4

Minimum Required Grade: C-

Upper Division Physics Core

Rule: Must complete 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

Minimum Required Grade: C-

Upper Division Astronomy Core

Rule: Must complete the following courses

Note: ASTR 351 and ASTR 362 are recommended as well

ASTR 353	Galactic Astrophysics	3
ASTR 363	Stellar Astr & Astrophys I	3
ASTR 365	Stellar Ast & Astrophys II	3
Total Hours		9

Minimum Required Grade: C-

Major Electives

Rule: Complete the following subcategories of courses

12 Total Credits Required

Physics Electives

Select three of the following: 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

Minimum Required Grade: C-

Physics Laboratory Electives

Select one of the following laboratory courses: 3

ASTR 362	Observational Astronomy	
PHSX 323	Intermediate Physics Lab	
PHSX 444	Advanced Physics Lab	

Total Hours 3

Minimum Required Grade: C-

Math Requirements

Rule: Complete the following courses

Note: M 317, M 412, and M 418 are recommended as well

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

Minimum Required Grade: C-

Computer Science Electives

Select one of the following: 3

CSCI 100	Intro to Programming	
CSCI 135	Fund of Computer Science I	
CSCI 250	Computer Mdlng/Science Majors (strongly recommended)	
PHSX 333	Computational Physics (strongly recommended)	

Total Hours 3

Minimum Required Grade: C-

Advanced College Writing Requirement

Rule: Must take the following course

Note: May substitute another advanced writing course as approved by the department chair.

PHSX 330	Communicating Physics	3
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Total Hours 3

Minimum Required Grade: C-

Physics - Teaching Broadfield Science

Individuals interested in teaching in K-12 schools must complete a degree in the content area they want to teach plus the teacher preparation program through the Department of Teaching and Learning. Individuals must complete the teaching major/teaching track within that degree program, which may contain different course requirements than the academic major since the sequence of courses is designed to meet state standards. Upon completion of the degree program with the teaching track and the secondary licensure program, one will be eligible for a standard Montana teaching license in this content area.

- Secondary Education Licensure Program (<http://www.coehs.umt.edu/departments/currinst/undergradprograms/seced/default.php>)
- Licensure Degree Requirements (p. 101)

Bachelor of Arts - Physics; Broadfield Teaching Science Concentration

College Humanities & Sciences

Degree Specific Credits: 83

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

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 (p. 95) 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 (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

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: Must complete all of the following subcategories

Minimum Required Grade: C-

24 Total Credits Required

Required Physics Courses

Rule: All courses are required

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

Rule: Must complete 1 additional upper division Physics course

Math Requirements

Rule: All courses are required

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

Rule: Must complete 1 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

Rule: All courses are required

ASTR 131N	Planetary Astronomy	3
ASTR 134N	Planetary Astronomy Lab	1
Total Hours		4

Minimum Required Grade: C-

Geology Requirements

Rule: Must complete the following subcategories

7 Total Credits Required

Required Geology Courses

Rule: All courses are required

GEO 101N	Introduction to Physical Geology	3
GEO 102N	Introduction to Physical Geology Lab	1
Total Hours		4

Minimum Required Grade: C-

Geology Electives

Select one of the following: 3

ASTR 351	Planetary Science	
GEO 105N	Oceanography	
Total Hours		3

Minimum Required Grade: C-

Biology Requirements

Rule: Must 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

Rule: Must complete all of the following courses

CHMY 141N	College Chemistry I	5
& CHMY 142N	and College Chemistry I Lab	
CHMY 143N	College Chemistry II	5
& CHMY 144N	and College Chemistry II Lab	
CHMY 485	Laboratory Safety	1
Total Hours		11

Minimum Required Grade: C-

Advanced College Writing Requirement

Rule: Must take the following course

Note: May substitute another advanced writing course as approved by the department chair.

PHSX 330	Communicating Physics	3
Total Hours		3

Minimum Required Grade: C-

Teaching Methods Requirement

Rule: Complete the following course.

Note: The EDU 497 course number is used for multiple courses. Students should register for EDU 497 Methods: 5-12 Science.

EDU 497	Teaching and Assessing	4
Total Hours		4

Minimum Required Grade: C-

Physics - Computational Physics

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 Humanities & Sciences

Degree Specific Credits: 73

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umd.edu/academics/general-education-requirements>) of the catalog.

Summary

Lower Division Physics Core	10
College Physics	
Physics with Calculus	
Upper Division Physics	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

Lower Division Physics Core

Rule: Must complete all of the courses in one of the two sequences:

College Physics

Select one of the following Physics sequences: 10

Algebra- and Trigonometry-based:

PHSX 205N College Physics I
& PHSX 206N and College Physics I Laboratory

PHSX 207N College Physics II
& PHSX 208N and College Physics II Laboratory

Calculus-based (strongly recommended):

PHSX 215N Fund of Physics w/Calc I
& PHSX 216N and Physics Laboratory I w/Calc

PHSX 217N	Fund of Physics w/Calc II & PHSX 218N and Physics Laboratory II w/Calc	10
Total Hours		10

Minimum Required Grade: C-

Upper Division Physics

Rule: Complete 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

Minimum Required Grade: C-

Physics Elective

Select one of the following: 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

Minimum Required Grade: C-

Math Requirements

Rule: Complete the following courses

Note: M 307, STAT 341, and STAT 458 are recommended as well

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

Minimum Required Grade: C-

Computer Science Requirements

Rule: Complete the following subcategories of courses

20 Total Credits Required

Computer Science Core Courses**Rule:** Must complete all of the following courses

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

Minimum Required Grade: C-

Computer Science Electives

Select 7 credits from any CSCI course numbered 200 and above, the following are recommended: 7

CSCI 205	Programming Languages w/ C/C++	
CSCI 250	Computer Mdlng/Science Majors	
CSCI 361	Computer Architecture	
CSCI 477	Simulation	
Total Hours		7

Advanced College Writing Requirement**Rule:** Must take the following course**Note:** May substitute another advanced writing course as approved by the department chair.

PHSX 330	Communicating Physics	3
Total Hours		3

Minimum Required Grade: C-

Physics Minor**Minor - Physics (Minor)****College Humanities & Sciences**

Degree Specific Credits: 24

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018**Note:** Mathematics prerequisites for the physics minor are M 171, M 172, M 273, (and M 221 if needed).**Summary**

Required Lower Division Courses	10	
College Physics		
Physics with Calculus		
Upper Division Core Course	3	
Elective Courses	11	
Total Hours		24

Required Lower Division Courses**Rule:** Must complete all of the following courses in one of the two options:**Note:** The Physics with Calculus series (PHSX 215N - PHSX 218N) is strongly recommended.

10 Total Credits Required

College Physics**Rule:** May complete all of the following courses:

PHSX 205N	College Physics I	4
PHSX 206N	College Physics I Laboratory	1
PHSX 207N	College Physics II	4
PHSX 208N	College Physics II Laboratory	1
Total Hours		10

Minimum Required Grade: C-

Physics with Calculus**Rule:** May complete all of the following courses:

PHSX 215N	Fund of Physics w/Calc I (strongly recommended)	4
PHSX 216N	Physics Laboratory I w/Calc (strongly recommended)	1
PHSX 217N	Fund of Physics w/Calc II (strongly recommended)	4
PHSX 218N	Physics Laboratory II w/Calc (strongly recommended)	1
Total Hours		10

Minimum Required Grade: C-

Upper Division Core Course**Rule:** Must complete the following course:

PHSX 301	Intro Theoretical Physics	3
Total Hours		3

Minimum Required Grade: C-

Elective Courses

Select 11 credits with 8 upper division credits from the following: 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

Minimum Required Grade: C-

The term 'minor' for this teaching option refers to courses that need to be completed. To sign up for this option, you need to contact the Teaching and Learning Department. Do not fill out a minor form for graduation or the minor section of the major change form. Approvals for this option must come from the Teaching and Learning Department.

Teaching Physics Track

A teaching minor is an academic minor which may contain different course requirements designed to meet state standards. Those interested in teaching in K-12 schools must complete a teaching major in a content area plus the teacher preparation program through the Department of Teaching and Learning. Additional teaching areas can be added through completion of either a teaching major or a teaching minor in that content area.

- Secondary Education Licensure Program (<http://www.coehs.umt.edu/departments/currinst/undergradprograms/seced/default.php>)
- Licensure Degree Requirements (p. 101)

Teaching Licensure Requirements

Note: Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Teaching and Learning (p. 95) in the College of Education and Human Sciences for more information. A minor GPA of 2.75 is required to be eligible for student teaching. Individuals completing a teaching minor must also complete a teaching major in another content area.

Teaching Licensure Course

Rule: Must complete the following course

Note: The EDU 497 course number is used for multiple courses. Students should register for EDU 497 Methods: 5-12 Science.

EDU 497	Teaching and Assessing	4
Total Hours		4

Minimum Required Grade: C-

Political Science Department

Karen Adams, Chair

Political Science is the systematic study of politics. Politics influence how people and institutions exercise and resist power. Political Science, therefore, is concerned with how nations and communities are governed and who governs them. The departmental faculty members have as their mission the engagement and enlightenment of their students, professional colleagues, and fellow citizens about the nature of politics.

The department offers a varied undergraduate curriculum covering domestic, foreign, and international politics. By meeting the requirements outlined below, a student may earn a bachelor's degree in political science or in political science-history; a minor in political science or

global public health; or a bachelor's degree in political science with an option in one of the following: American politics, international relations and comparative politics, public administration, non-profit administration, international development studies, or public law. A Master of Arts degree in political science and a Master of Public Administration degree are also offered.

The scope of the faculty's interest and research is wide. They bring special insights gained through study and residence in Europe, Russia, Africa, Central Asia, India, the Far East and Latin America, as well as in Montana and Washington, D.C.

Courses offered in the department are designed to: (1) assist students to secure a broad liberal education and to equip them with the foundations for American citizenship; (2) provide undergraduate preparation for those students who propose to continue study at the graduate level with the ultimate goal of college teaching and research; (3) offer a broad program of training for those students who plan careers in government or politics; (4) assist in preparing students for careers in teaching at both the elementary and secondary levels; (5) provide a sound background for those students who intend to enroll in law and other professional schools.

The major fields of political science are (1) American government and politics with national, state and local government, and public law as sub-fields; (2) public administration; (3) political theory; (4) comparative government; (5) international relations, organization and law. Majors are eligible for membership in Pi Sigma Alpha, the national political science honorary and are active in student political activities. The Department of Political Science secures a number of legislative and administrative internships in state and local government each year. Internships and other learning opportunities in Washington, D.C., are also available.

Undergraduate

- Political Science B.A. (p. 328)
- Political Science B.A., American Politics Concentration (p. 316)
- Political Science B.A., International Relations & Comparative Politics Concentration (p. 319)
- Political Science B.A., Public Administration Concentration (p. 330)
- Political Science B.A., Public Law Concentration (p. 332)
- Political Science-History B.A (p. 324).

Undergraduate Minors

- Global Public Health (p. 318)
- Nonprofit Administration (p. 321)
- Political Science (p. 322)

Graduate

- Political Science M.A. (<http://hs.umt.edu/polsci/graduate/maPoliticalScience.php>)
- Public Administration (M.P.A.) (<http://hs.umt.edu/polsci/graduate/mpa-public-administration/default.php>)

American Politics

Bachelor of Arts - Political Science; American Politics Concentration

College Humanities & Sciences

Degree Specific Credits: 40

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Note: Students majoring in Political Science with an concentration in American Politics option must take a minimum of 40 credits of political science, including one 300-400 level course in four of the five major fields.

- 21 of the 40 credits must be in upper-division courses.
- No more than 7 credits of PSCI 492 and PSCI 498 combined may count toward the 40 required credits.
- A maximum of 60 PSCI credits can count towards the Political Science Major.

Students can use the same 300/400 course to fulfill both an upper-division field and concentration requirements, but 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 (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

Required Lower Division Courses	12
Required Upper Division Courses	1
Degree Electives	15
Required Upper Division Field Courses	12
Public Administration	
Political Theory	
Comparative Government	
International Relations	
American Politics	
Total Hours	40

Required Lower Division Courses

Rule: Must complete all of the following courses:

PSCI 210S	Intro to American Government	3
PSCI 220S	Intro to Comparative Govt	3
PSCI 230X	Intro to International Rel	3
PSCI 250E	Intro to Political Theory	3
Total Hours		12

Minimum Required Grade: C-

Required Upper Division Courses

Rule: Must complete the following course:

PSCI 400	Adv Writing in Pol Science	1
Total Hours		1

Minimum Required Grade: C-

Degree Electives

Select five of the following:		15
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 440	Exp Offering: American Govt	
PSCI 443	Politics of Social Movements	
PSCI 444	Am Political Participation	
PSCI 445	Political Psychology	
PSCI 468	Public Policy Cycle and the Climate	
Total Hours		15

Minimum Required Grade: C-

Required Upper Division Field Courses

Rule: Must complete 1 upper division course in 4 of the 5 fields:

Note: Any field course can also be counted toward a Political science option. Student must take an additional four courses from the following options.

Minimum Required Grade: C-

12 Total Credits Required

Public Administration and Public Policy

Select 3 credits from the following:		3
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 449	Environmental Health Policy	
PSCI 461	Administrative Law	
PSCI 462	Human Resource Management	
PSCI 463	Development Administration	
PSCI 466	Nonprofit Adm & Pub Svc	
PSCI 467	Adv Nonprofit Adm	
PSCI 468	Public Policy Cycle and the Climate	
PSCI 469	Ethics and Public Policy	
Total Hours		3

Minimum Required Grade: C-

Political Theory

Select 3 credits from the following: 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

Select 3 credits from the following: 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

Minimum Required Grade: C-

International Relations

Select 3 credits from the following: 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

Select 3 credits from the following: 3

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 440	Exp Offering: American Govt
PSCI 443	Politics of Social Movements
PSCI 444	Am Political Participation
PSCI 445	Political Psychology
PSCI 468	Public Policy Cycle and the Climate
PSCI 471	American Constitutional Law
PSCI 474	Civil Rights Seminar
NASX 475	Tribal Sovereignty

Total Hours 3

Minimum Required Grade: C-

Global Public Health Minor

Minor - Global Public Health (Minor)

College Humanities & Sciences

Degree Specific Credits: 21

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

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

Required Courses	6
Core Electives	9
Content Electives	6
Total Hours	21

Required Courses**Rule:** Must complete all of the following:

BIOM 227	Vectors and Parasites	3
PSCI 227	Global Health Issues	3
Total Hours		6

Minimum Required Grade: C-

Core Electives

Note: The student should select the Ethnobotany of Amerindians section of PHAR 391.

The student should select the Public Health Genetics section of PHAR 491.

Select 9 credits from the following: 9

AHHS 430	Health Aspects of Aging
ANTY 349	Social Change in NnWstrn Socts
ANTY 426	Culture, Health and Healing
BIOM 400	Medical Microbiology
BIOM 427	General Parasitology
BIOM 428	General Parasitology Lab
CHTH 355	Theory Practicum Community Health Education
CHTH 445	Program Plannig in Community Health
COMX 425	Comm in Health Organizations
ECNS 310	Intro Health Economics
PHAR 320	Am Ind Health Issues
PHAR 391	Special Topics (Ethnobotany of Amerindians section)
PHAR 491	Special Topics (Public Health Genetics section)
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

Total Hours 9

Minimum Required Grade: C-

Content Electives

Select 6 credits from the following: 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
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 250N	Microbiology for Hlth Sciences
BIOM 402	Medical Bacteriology& Mycology
BIOM 435	Virology
COMX 204X	International & Dvlpmnt Comm
COMX 415	Intercultural Communication
COMX 485	Communication and Health
ECNS 217X	Issues in Economic Development
HTH 430	Health and Mind/Body/Spirit
NASX 303E	Ecol Persp in Nat Amer Trad
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
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
SOCI 443	Sociology of Poverty
SOCI 471	Gender and Global Development
WGSS 263S	Social and Political Perspectives on Women, Men, and Sexuality

Total Hours 6

Minimum Required Grade: C-

International Relations and Comparative Politics

Bachelor of Arts - Political Science; International Relations & Comparative Politics Concentration

College Humanities & Sciences

Degree Specific Credits: 40

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Note: Students majoring in Political Science with an concentration in International Relations and Comparative Politics must take a minimum of 40 credits of political science, including one 300-400 level course in four of the five major fields.

- 21 of the 40 credits must be in upper-division courses.
- No more than 7 credits of PSCI 492 and PSCI 498 combined may count toward the 40 required credits.
- A maximum of 60 PSCI credits can count towards the Political Science Major.

Students can use the same 300/400 course to fulfill both an upper-division field and concentration requirements, but cannot double-count the course credits.

It is strongly recommended that a student complete either

1. Two years of a foreign language study.
2. A study-abroad program or an internship is strongly recommended.

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umd.edu/academics/general-education-requirements>) of the catalog.

Summary

Required Lower Division Courses	12
Required Upper Division Course	1
Degree Electives	18
International Relations Field Courses	
Comparative Politics Field Courses	
Required Upper Division Field Courses	12
Public Administration	
Political Theory	
Comparative Government	
International Relations	
American Politics	
Total Hours	43

Required Lower Division Courses

Rule: Must complete all of the following courses:

PSCI 210S	Intro to American Government	3
PSCI 220S	Intro to Comparative Govt	3
PSCI 230X	Intro to International Rel	3
PSCI 250E	Intro to Political Theory	3
Total Hours		12

Minimum Required Grade: C-

Required Upper Division Course

Rule: Must complete the following course:

PSCI 400	Adv Writing in Pol Science	1
Total Hours		1

Minimum Required Grade: C-

Degree Electives

Rule: Must complete the following subcategories

Note: 3 of these credits can be counted toward fulfilling the upper-division core.

15-18 Total Credits Required

International Relations Field Courses

Select three of the following:	9
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	9

Minimum Required Grade: C-

Comparative Politics Field Courses

Select three of the following:	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 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	9

Minimum Required Grade: C-

Required Upper Division Field Courses

Rule: Must complete 1 upper division course in 4 of the 5 fields:

Note: Any field course can also be counted toward a Political Science concentration.

Minimum Required Grade: C-

12 Total Credits Required

Public Administration and Public Policy

Select 3 credits from the following:	3
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 449	Environmental Health Policy
PSCI 461	Administrative Law
PSCI 462	Human Resource Management
PSCI 463	Development Administration
PSCI 466	Nonprofit Adm & Pub Svc
PSCI 467	Adv Nonprofit Adm
PSCI 468	Public Policy Cycle and the Climate
PSCI 469	Ethics and Public Policy
Total Hours	3

Minimum Required Grade: C-

Political Theory

Select 3 credits from the following:	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

Select 3 credits from the following:		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

Minimum Required Grade: C-

International Relations

Select 3 credits from the following:		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

Select 3 credits from the following:		3
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 440	Exp Offering: American Govt	
PSCI 443	Politics of Social Movements	
PSCI 444	Am Political Participation	
PSCI 445	Political Psychology	
PSCI 468	Public Policy Cycle and the Climate	
PSCI 471	American Constitutional Law	
PSCI 474	Civil Rights Seminar	
NASX 475	Tribal Sovereignty	
Total Hours		3

Minimum Required Grade: C-

Nonprofit Administration Minor Minor - Nonprofit Administration (Minor)

College Humanities & Sciences

Degree Specific Credits: 21

Required Cumulative GPA: 2.5

Catalog Year: 2017-2018 Summary

Upper Division Core Courses	9
Required Courses	
Upper Division Core Elective Credits	
Degree 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

Upper Division Core Courses

Rule: Must complete the following subcategories

Minimum Required Grade: C-

9 Total Credits Required

Required Courses

Rule: Both courses are required

PSCI 466	Nonprofit Adm & Pub Svc	3
PSCI 467	Adv Nonprofit Adm	3
Total Hours		6

Minimum Required Grade: C-

Upper Division Core Elective Credits

Rule: Choose 1 of the following courses

HONR 398	Internship	3
or PSCI 498	Intern/coop education/omnibus	
Total Hours		3

Minimum Required Grade: C-

Degree Elective Courses

Rule: Must complete 12 credits from at least 4 of the following 6 areas:

Minimum Required Grade: C-

12 Total Credits Required

Communication Skills

Select one of the following: 3

BMGT 420	Leadership and Motivation
COMX 115S	Introduction to Interpersonal Communications
COMX 210	Communication in Small Groups
COMX 415	Intercultural Communication
COMX 421	Comm in Non-Profit Organizatns
COMX 422	Communication and Technology
COMX 423	Org Comm Consult & Train
COMX 424	Risk Crisis & Comm

Total Hours 3

Minimum Required Grade: C-

Youth and Adult Development

Select one of the following: 3

PSYX 230	Developmental Psychology
PSYX 233	Fund of Psychology of Aging
SOCI 330	Juvenile Delinquency
SOCI 335	Juvenile Justice System

Total Hours 3

Minimum Required Grade: C-

Human Resources Development and Supervision

Select one of the following: 3

COMX 220S	Intro to Organizational Comm
PSCI 462	Human Resource Management
PTRM 380	Rec Admin & Leadership

Total Hours 3

Minimum Required Grade: C-

Nonprofit Program Planning

Rule: Complete the following course:

PTRM 485	Recreation Planning	3
Total Hours		3

Minimum Required Grade: C-

Nonprofit Marketing

Rule: May complete 3 credits from the following courses:

BMKT 343	Integrated Marketing Comm	3
or BMKT 412	Non Profit Marketing	
Total Hours		3

Minimum Required Grade: C-

Nonprofit Accounting/Financial Management

Rule: May complete 3 credits from the following courses:

ACTG 201	Principles of Financial Accounting	3
Total Hours		3

Minimum Required Grade: C-

Political Science Minor Minor - Political Science (Minor)

College Humanities & Sciences

Degree Specific Credits: 21

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Note: Nine of the 21 required credits must be in 300-400-level courses.

Required Lower Division Courses	12
Required Upper Division Field Courses	9
Public Administration	
Political Theory	
Comparative Government	
International Relations	
American Politics	
Total Hours	21

Required Lower Division Courses

Rule: Must complete all of the following courses:

PSCI 210S	Intro to American Government	3
PSCI 220S	Intro to Comparative Govt	3
PSCI 230X	Intro to International Rel	3
PSCI 250E	Intro to Political Theory	3
Total Hours		12

Minimum Required Grade: C-

Required Upper Division Field Courses

Rule: Must complete 1 course in 3 of the 5 following options:

Minimum Required Grade: C-

9 Total Credits Required

Public Administration and Public Policy

Select 3 credits from the following: 3

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 449	Environmental Health Policy
PSCI 461	Administrative Law
PSCI 462	Human Resource Management
PSCI 463	Development Administration
PSCI 466	Nonprofit Adm & Pub Svc
PSCI 467	Adv Nonprofit Adm
PSCI 468	Public Policy Cycle and the Climate
PSCI 469	Ethics and Public Policy

Total Hours 3

Minimum Required Grade: C-

Political Theory

Select 3 credits from the following: 3

PSCI 350	Exp Offering: Political Theory
PSCI 352	American Political Thought
PSCI 354	Contemp Issues in Pol Theory
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

Select 3 credits from the following: 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

Minimum Required Grade: C-

International Relations

Select 3 credits from the following: 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

Select 3 credits from the following: 3

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 440	Exp Offering: American Govt
PSCI 443	Politics of Social Movements
PSCI 444	Am Political Participation
PSCI 445	Political Psychology
PSCI 468	Public Policy Cycle and the Climate
PSCI 471	American Constitutional Law
PSCI 474	Civil Rights Seminar
NASX 475	Tribal Sovereignty

Total Hours 3

Minimum Required Grade: C-

Teaching Government Track

A teaching minor is an academic minor which may contain different course requirements designed to meet state standards. Those interested in teaching in K-12 schools must complete a teaching major in a content area plus the teacher preparation program through the Department of Teaching and Learning. Additional teaching areas can be added through completion of either a teaching major or a teaching minor in that content area.

- Secondary Education Licensure Program (<http://www.coehs.umt.edu/departments/currinst/undergradprograms/seced/default.php>)
- Licensure Degree Requirements (p. 101)

The term 'minor' for this teaching option refers to courses that need to be completed. To sign up for this option, you need to contact the Curriculum and Instruction Department. Do not fill out a minor form for graduation or the minor section of the major change form. Approvals for this option must come from the Curriculum and Instruction Department.

Teaching Licensure Requirements

Note: Individuals completing a teaching minor must also complete a teaching major in another content area. Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Teaching and Learning (p. 95) in the College of Education and Human

Sciences for more information. A minor GPA of 2.75 is required to be eligible for student teaching.

Teaching Methods Course

Rule: Complete the following course.

Note: The EDU 497 course number is used for multiple courses. Students should register for EDU 497 Methods: 5-12 Social Studies.

EDU 497	Teaching and Assessing	4
Total Hours		4

Minimum Required Grade: C-

Political Science-History B.A. Teaching Social Studies

Individuals interested in teaching in K-12 schools must complete a degree in the content area they want to teach plus the teacher preparation program through the Department of Curriculum and Instruction. Individuals must complete the teaching major/teaching track within that degree program, which may contain different course requirements than the academic major since the sequence of courses is designed to meet state standards. Upon completion of the degree program with the teaching track and the secondary licensure program, one will be eligible for a standard Montana teaching license in this content area.

- Secondary Education Licensure Program (<http://www.coehs.umt.edu/departments/currinst/undergradprograms/seced/default.php>)
- Licensure Degree Requirements (http://archive.umt.edu/catalog/15_16/colleges-schools-programs/education-and-human-sciences/curriculum-and-instruction/lic-secondary-licensure/default.php)

To sign up for this option, you need to contact the Curriculum and Instruction Department. Do not fill out a major/minor form for graduation or the major/minor/concentration section of the major change form. Approvals for this option must come from the Curriculum and Instruction Department.

Tracks will not appear on your UM transcript, diploma, university lists, student data system, or university publication and are used for advising purposes only. You do not fill out a major change for a track.

Bachelor of Arts - Political Science - History; Track: Teaching Social Studies College Humanities & Sciences

Degree Specific Credits: 74

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

Lower Division Core Courses	28
Core Course	
American History Introductory Courses	
Western History Introductory Courses	
Upper Division History Elective	3
American History Elective	3
World History Elective	3
European History Elective	3
American Government/Public Law Electives	9
Comparative/International Relations Electives	9
Additional Electives	9
Economics	
Geography	
Psychology	
Sociology	
Education Methods	4
Upper Division Writing Requirement	3
Total Hours	74

Lower Division Core Courses

Rule: Must complete the following subcategories

28 Total Credits Required

Core Courses

Rule: Must complete all of the following courses:

HSTA 255	Montana History	3
HSTR 200	Intro: Historical Methods	1
PSCI 210S	Intro to American Government	3
PSCI 220S	Intro to Comparative Govt	3
PSCI 230X	Intro to International Rel	3
PSCI 250E	Intro to Political Theory	3
Total Hours		16

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.

Select two of the following:	8
HSTA 101H	American History I
HSTA 102H	American History II
HSTA 103H	Honors American History I
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.

Select one of the following:	4
HSTR 101H	Western Civilization I

HSTR 102H	Western Civilization II
HSTR 103H	Honors Western Civilization I
HSTR 104H	Honors Western Civilization II
<hr/>	
Total Hours	4

Minimum Required Grade: C-

Upper Division History Elective

Rule: Must complete at least 3 credits of upper division HSTA or HSTA electives

Minimum Required Grade: C-

3 Total Credits Required

American History Elective

Note: Students are expected to take 3 additional Upper Division History credits beyond those specified and may be selected from this category.

Note: HSTR 391, HSTR 392, HSTR 491, HSTR 492 and HSTA 391 and HSTA 491 may apply to this requirement depending on the course content.

Select at least 3 credits from the following: 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 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 494	Seminar
HSTR 364	Environmental History
HSTR 369	20th Cent Amer West
NASX 354X	Indians of MT since Rsrvtm Era

Total Hours 3

Minimum Required Grade: C-

World History Elective

Note: Students are expected to take 3 additional Upper Division History credits beyond those specified and may be selected from this category.

Note: HSTR 391, HSTR 392, HSTR 491, HSTR 492 and HSTA 391 and HSTA 491 may apply to this requirement depending on the course content.

Select at least 3 credits from the following: 3

HSTR 146H	The Silk Road
HSTR 230H	Colonial Latin America
HSTR 231H	Modern Latin America
HSTR 240	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 435	Lat Am Human Rgts & Memory

Total Hours 3

Minimum Required Grade: C-

European History Elective

Note: Students are expected to take 3 additional Upper Division History credits beyond those specified and may be selected from this category.

Note: HSTR 391, HSTR 492, HSTR 491, may apply to this requirement depending on the course content.

Select at least 3 credits from the following: 3

HSTR 312	Age of Absolut 1648-1789
HSTR 320	Europ Social & Intellect Hist
HSTR 323	Europ Social & Intellect Hist
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

Total Hours 3

Minimum Required Grade: C-

American Government/Public Law Electives

Select 9 credits from the following: 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	Public Policy Cycle and the Climate
PSCI 471	American Constitutional Law
PSCI 474	Civil Rights Seminar
Total Hours	9

Minimum Required Grade: C-

Comparative/International Relations Electives

Select 9 credits from the following:	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 Electives

Economics

Note: ECNS 191, ECNS 391, ECNS 392, ECNS 491, and ECNS 492 may apply to this requirement depending on the course content.

Select 9 credits from the following:	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.

Select 9 credits from the following:	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	Cultural Ecology
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, and PSYX 491 may apply to this requirement depending on the course content.

Select 9 credits from the following:		9
PSYX 100S	Intro to Psychology	
PSYX 105	Careers in Psychology	
PSYX 120	Research Methods I	
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	Research Methods III	
PSYX 340	Abnormal Psychology	
PSYX 345	Child & Adolescent Psych Dis	
PSYX 348	Psychology of Family Violence	
PSYX 352	Comparative Psychology	
PSYX 356	Human Neuropsychology	
PSYX 360	Social Psychology	
PSYX 362	Multicultural Psychology	
PSYX 376	Prin Cognit Behav Mod	
PSYX 377	Personalized Student Instr	
PSYX 378	Intro to Clinical Psyc	
PSYX 385	Psychology of Personality	
PSYX 400	History & System in Psychology	
PSYX 442	Counseling Theories in Context	
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.

Select 9 credits from the following:		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 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 330	Juvenile Delinquency	
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-

Upper Division Writing Requirement

Select one of the following:		3
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

Teaching Social Studies Track

Individuals interested in teaching in K-12 schools must complete a degree in the content area they want to teach plus the teacher preparation program through the Department of Curriculum and Instruction. Individuals must complete the teaching major/teaching track within that degree program, which may contain different course requirements than the academic major since the sequence of courses is designed to meet state standards. Upon completion of the degree program with the

teaching track and the secondary licensure program, one will be eligible for a standard Montana teaching license in this content area.

- Secondary Education Licensure Program (<http://www.coehs.umt.edu/departments/currinst/undergradprograms/seced/default.php>)
- Licensure Degree Requirements (p. 101)

This major is intended solely for students who want to be licensed to teach history, government, and one additional social science at the middle and high school levels. Requirements for the combined history/political science major are as follows:

- **in political science**, a minimum of 30 credits, including:
 - PSCI 210S, PSCI 220S, PSCI 230X, PSCI 250E,
 - three upper-division elective courses in American government or public law, and
 - three upper-division elective courses in comparative or international relations;
- **in history**, a minimum of 31 credits, including:
 - HSTR 101H or HSTR 102H,
 - HSTA 101H and HSTA 102H, HSTR 200, HSTA 255,
 - one elective course in world history,
 - three upper-division elective courses to include at least one American and one European course, and
 - one HSTA/HSTR 400-level approved writing course;
- **in one additional social science**, a minimum of 9 elective credits in economics or geography or psychology or sociology; and EDU 497 .

Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. Students are eligible for a teaching license in social studies broadfield. See the Department of Curriculum & Instruction (p. 95) for more information.

To sign up for this option, you need to contact the Curriculum and Instruction Department. Do not fill out a major/minor form for graduation or the major/minor/concentration section of the major change form. Approvals for this option must come from the Curriculum and Instruction Department.

Tracks will not appear on your UM transcript, diploma, university lists, student data system, or university publication and are used for advising purposes only. You do not fill out a major change for a track.

Note: Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. Students who complete the political science/history combined major are eligible for a teaching license in social studies broadfield. See the Department of Teaching and Learning (p. 95) 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.

Education Methods

Rule: Complete the following course.

Note: The EDU 497 course number is used for multiple courses. Students should register for EDU 497 Methods: 5-12 Social Studies.

EDU 497	Teaching and Assessing	4
Total Hours		4

Minimum Required Grade: C-

Political Science B.A. Bachelor of Arts - Political Science

College Humanities & Sciences

Degree Specific Credits: 37

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

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 (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

Required Lower Division Courses	12
Upper Division Writing	1
Required Upper Division Field Courses	12
Public Administration	
Political Theory	
Comparative Government	
International Relations	
American Politics	
Degree Electives	12
Total Hours	37

Required Lower Division Courses

Rule: Must complete all of the following courses:

PSCI 210S	Intro to American Government	3
PSCI 220S	Intro to Comparative Govt	3
PSCI 230X	Intro to International Rel	3
PSCI 250E	Intro to Political Theory	3
Total Hours		12

Minimum Required Grade: C-

Upper Division Writing

Rule: Must complete the following course

PSCI 400	Adv Writing in Pol Science	1
Total Hours		1

Minimum Required Grade: C-

Required Upper Division Field Courses

Rule: Must complete 1 upper division course in 4 of the 5 fields:

Minimum Required Grade: C-

12 Total Credits Required

Public Administration and Public Policy

Select 3 credits from the following: 3

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 449	Environmental Health Policy
PSCI 461	Administrative Law
PSCI 462	Human Resource Management
PSCI 463	Development Administration
PSCI 466	Nonprofit Adm & Pub Svc
PSCI 467	Adv Nonprofit Adm
PSCI 468	Public Policy Cycle and the Climate
PSCI 469	Ethics and Public Policy

Total Hours 3

Minimum Required Grade: C-

Political Theory

Select 3 credits from the following: 3

PSCI 350	Exp Offering: Political Theory
PSCI 352	American Political Thought
PSCI 354	Contemp Issues in Pol Theory
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

Select 3 credits from the following: 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 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

Minimum Required Grade: C-

International Relations

Select 3 credits from the following: 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

Select 3 credits from the following: 3

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 440	Exp Offering: American Govt
PSCI 443	Politics of Social Movements
PSCI 444	Am Political Participation
PSCI 445	Political Psychology
PSCI 468	Public Policy Cycle and the Climate
PSCI 471	American Constitutional Law
PSCI 474	Civil Rights Seminar
NASX 475	Tribal Sovereignty

Total Hours 3

Minimum Required Grade: C-

Degree Electives

Rule: Must complete 12 additional elective credits from PSCI courses numbered 300 and above

Note: PSCI courses may only count toward one category of requirements.

Minimum Required Grade: C-

12 Total Credits Required

Teaching Government Track

Individuals interested in teaching in K-12 schools must complete a degree in the content area they want to teach plus the teacher preparation program through the Department of Teaching and Learning. Individuals must complete the teaching major/teaching track within that degree program, which may contain different course requirements than the academic major since the sequence of courses is designed to meet state standards. Upon completion of the degree program with the teaching track and the secondary licensure program, one will be eligible for a standard Montana teaching license in this content area.

- Secondary Education Licensure Program (<http://www.coehs.umt.edu/departments/currinst/undergradprograms/seced/default.php>)
- Licensure Degree Requirements (p. 101)

To sign up for this option, you 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. Approvals for this option 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.

Note: Students with a teaching major in political science must also complete a teaching major or minor in a second field. For the political science teaching major, students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Teaching and Learning (p. 95) 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.

PSCI courses may only count toward one category of requirements.

Upper Division Core

Rule: Must complete the following course:

EDU 497	Teaching and Assessing	4
Total Hours		4

Minimum Required Grade: C-

Public Administration Bachelor of Arts - Political Science; Public Administration Concentration

College Humanities & Sciences

Degree Specific Credits: 40

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Note: Students majoring in Political Science with an concentration in Public Administration must take a minimum of 40 credits of political science, including one 300-400 level course in four of the five major fields.

- 21 of the 40 credits must be in upper-division courses.
- No more than 7 credits of PSCI 492 and PSCI 498 combined may count toward the 40 required credits.
- A maximum of 60 PSCI credits can count towards the Political Science Major.

Students can use the same 300/400 course to fulfill both an upper-division field and option requirements, but 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 (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

Required Lower Division Courses	12
Required Upper Division Courses	4
Degree Electives	12
Required Upper Division Field Courses	12
Public Administration	
Political Theory	
Comparative Government	
International Relations	
American Politics	
Total Hours	40

Required Lower Division Courses

Rule: Must complete all of the following courses:

PSCI 210S	Intro to American Government	3
PSCI 220S	Intro to Comparative Govt	3
PSCI 230X	Intro to International Rel	3
PSCI 250E	Intro to Political Theory	3
Total Hours		12

Minimum Required Grade: C-

Required Upper Division Courses

Rule: Must complete the following courses

PSCI 361	Public Administration	3
PSCI 400	Adv Writing in Pol Science	1
Total Hours		4

Minimum Required Grade: C-

Degree Electives

Select four of the following:		12
PSCI 344	State and Local Government	
PSCI 360	Exp Offering: Public Admin	
PSCI 365	Pub Policy Issues and Analysis	
PSCI 461	Administrative Law	

PSCI 462	Human Resource Management	
PSCI 463	Development Administration	
PSCI 466	Nonprofit Adm & Pub Svc	
PSCI 467	Adv Nonprofit Adm	
PSCI 468	Public Policy Cycle and the Climate	
PSCI 469	Ethics and Public Policy	
Total Hours		12

Minimum Required Grade: C-

Required Upper Division Field Courses

Rule: Must complete 1 upper division course in 4 of the 5 fields:

Note: Any field course can also be counted toward a Political Science Concentration.

Minimum Required Grade: C-

12 Total Credits Required

Public Administration and Public Policy

Select 3 credits from the following: 3

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 449	Environmental Health Policy	
PSCI 461	Administrative Law	
PSCI 462	Human Resource Management	
PSCI 463	Development Administration	
PSCI 466	Nonprofit Adm & Pub Svc	
PSCI 467	Adv Nonprofit Adm	
PSCI 468	Public Policy Cycle and the Climate	
PSCI 469	Ethics and Public Policy	
Total Hours		3

Minimum Required Grade: C-

Political Theory

Select 3 credits from the following: 3

PSCI 350	Exp Offering: Political Theory	
PSCI 352	American Political Thought	
PSCI 354	Contemp Issues in Pol Theory	
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

Select 3 credits from the following: 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

Minimum Required Grade: C-

International Relations

Select 3 credits from the following: 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

Select 3 credits from the following: 3

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 440	Exp Offering: American Govt	
PSCI 443	Politics of Social Movements	
PSCI 444	Am Political Participation	
PSCI 445	Political Psychology	
PSCI 468	Public Policy Cycle and the Climate	
PSCI 471	American Constitutional Law	
PSCI 474	Civil Rights Seminar	
NASX 475	Tribal Sovereignty	
Total Hours		3

Minimum Required Grade: C-

Public Law

Bachelor of Arts - Political Science; Public Law Concentration

College Humanities & Sciences

Degree Specific Credits: 40

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Note: Students majoring in Political Science with an concentration in Public Law must take a minimum of 40 credits of political science, including one 300-400 level course in four of the five major fields.

- 21 of the 40 credits must be in upper-division courses.
- No more than 7 credits of PSCI 492 and PSCI 498 combined may count toward the 40 required credits.
- A maximum of 60 PSCI credits can count towards the Political Science Major.

Students can use the same 300/400 course to fulfill both an upper-division field and concentration requirements, but 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 (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

Required Lower Division Courses	12
Required Upper Division Courses	4
Degree Electives	12
Required Upper Division Field Courses	12
Public Administration	
Political Theory	
Comparative Government	
International Relations	
American Politics	
Total Hours	40

Required Lower Division Courses

Rule: Must complete all of the following courses:

PSCI 210S	Intro to American Government	3
PSCI 220S	Intro to Comparative Govt	3
PSCI 230X	Intro to International Rel	3
PSCI 250E	Intro to Political Theory	3
Total Hours		12

Minimum Required Grade: C-

Required Upper Division Courses

Rule: Must complete all of the following courses:

PSCI 370	Courts and Judicial Politics	3
PSCI 400	Adv Writing in Pol Science	1
Total Hours		4

Minimum Required Grade: C-

Degree Electives

Select four of the following:		12
PSCI 352	American Political Thought	
PSCI 433	International Law & Org	
PSCI 461	Administrative Law	
PSCI 462	Human Resource Management	
PSCI 471	American Constitutional Law	
PSCI 474	Civil Rights Seminar	
Total Hours		12

Minimum Required Grade: C-

Required Upper Division Field Courses

Rule: Must complete 1 upper division course in 4 of the 5 fields:

Note: Any field course can also be counted toward a Political Science concentration.

Minimum Required Grade: C-

12 Total Credits Required

Public Administration and Public Policy

Select 3 credits from the following:		3
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 449	Environmental Health Policy	
PSCI 461	Administrative Law	
PSCI 462	Human Resource Management	
PSCI 463	Development Administration	
PSCI 466	Nonprofit Adm & Pub Svc	
PSCI 467	Adv Nonprofit Adm	
PSCI 468	Public Policy Cycle and the Climate	
PSCI 469	Ethics and Public Policy	
Total Hours		3

Minimum Required Grade: C-

Political Theory

Select 3 credits from the following:		3
PSCI 350	Exp Offering: Political Theory	
PSCI 352	American Political Thought	
PSCI 354	Contemp Issues in Pol Theory	
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

Select 3 credits from the following:		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

Minimum Required Grade: C-

International Relations

Select 3 credits from the following:		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

Select 3 credits from the following:		3
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 440	Exp Offering: American Govt	
PSCI 443	Politics of Social Movements	

PSCI 444	Am Political Participation	
PSCI 445	Political Psychology	
PSCI 468	Public Policy Cycle and the Climate	
PSCI 471	American Constitutional Law	
PSCI 474	Civil Rights Seminar	
NASX 475	Tribal Sovereignty	
Total Hours		3

Minimum Required Grade: C-

Psychology Department

Christine Fiore, Chair

Psychology is the science of the behavior of humans and other animals. The psychologist, using scientific methods, seeks to understand the causes and purposes of behavior. Psychologists pursue their research and its application in academia, business, government, health, military and social service. The department offers training that leads to the Bachelor of Arts, Master of Arts, Educational Specialist, and Doctor of Philosophy degrees.

Undergraduate

- Psychology B.A. (p. 337)
- Neuroscience B.S., Cellular and Molecular Concentration (p. 335)
- Neuroscience B.S., Cognitive Neuroscience Concentration (p. 336)

Undergraduate Minors

- Human and Family Development (p. 333)
- Psychology Minor (p. 338)

Human and Family Development Minor

Minor - Human and Family Development (Minor)

College Humanities & Sciences

Degree Specific Credits: 24

Required Cumulative GPA: 2.5

Catalog Year: 2017-2018

Note: To earn a minor the student must complete 24 credits, with 11 at the 300 level or above. All students are required to take a 12-credit core curriculum and, with the help of a faculty advisor, to develop a written statement of goals and interests along with a planned curriculum that includes 12 additional credits of electives consistent with the stated goals and interests. At least 6 credits of electives must be outside of the student’s major.

Summary

Core Courses	12
Subcategory 1	
Subcategory 2	

Subcategory 3	
Subcategory 4	
Elective Courses	12
Early Childhood	
School-Age	
Adolescence	
Gerontology	
Family Development	
Total Hours	24

Core Courses

Rule: Must complete the following subcategories

12 Total Credits Required

Subcategory 1

Rule: Must complete 1 of the following courses

PSYX 230	Developmental Psychology	3
or PSYX 233	Fund of Psychology of Aging	
Total Hours		3

Minimum Required Grade: C

Subcategory 2

Rule: Must complete all of the following courses:

Note: HFD 494 may be taken for 1 credit. HFD 498 must be taken for a minimum of 2 credits. Education majors may take C&I 295 to fulfill the HFD 498 requirement. Social Work majors may use S W 495 hours to fulfill the HFD 498 requirement.

HFD 494	Seminar in Human Development	1
HFD 498	Internship	2-4
Total Hours		3-5

Minimum Required Grade: C

Subcategory 3

Rule: Must complete 1 of the following courses

COMX 311	Family Communication	3
SOCI 332	Sociology of the Family	3
EDEC 410	Families, Communities, Culture	3
Total Hours		9

Minimum Required Grade: C

Subcategory 4

Select one of the following:		3
C&I 520	Educational Research	
COMX 460	Research Methods	
PSYX 120	Research Methods I	
S W 400	Social Work Research	
SOCI 318	Sociological Research Methods	
Total Hours		3

Minimum Required Grade: C

Elective Courses

Rule: Must complete 12 credits from any of the courses listed in the subcategories below; at least 6 credits must be taken outside of the student's major

Note: The list of electives is categorized to assist the student wishing to focus on one of these areas. Students may plan curricula which do not correspond to these categories, but should choose among courses from this list. Occasionally "special topics" courses are offered. Students may use these as electives with the consent of their advisors.

Check with departments regarding variable-credit 395 and 495-Special Topics listings.

12 Total Credits Required

Early Childhood

Select 12 credits from the following: 12

EDEC 230	Positive Child Guidance and Management with lab
EDEC 408	Early Childhood Principles and Practices
EDEC 410	Families, Communities, Culture
EDEC 430	SocEmot Dvlpmnt in Yng Child
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 345	Excpntly & Clsrn Mgmt
EDU 491	Special Topics/Exp Courses
HFD 498	Internship
PSYX 290	Supervised Research
PSYX 378	Intro to Clinical Psyc
Total Hours	12

Minimum Required Grade: C

School-Age

Select four of the following: 12

EDU 222	Educational Psych Child Dev
EDU 346	Exceptionalities
PHAR 110N	Use & Abuse of Drugs
PSYX 376	Prin Cognit Behav Mod
PSYX 378	Intro to Clinical Psyc
S W 300	Hum Behav & Soc Environ
S W 420	Child Abuse/Child Welfare
SOCI 330	Juvenile Delinquency
SOCI 332	Sociology of the Family
Total Hours	12

Minimum Required Grade: C

Adolescence

Select four of the following: 12

EDSP 462	Spec Ed Law, Policy, Practice
EDU 222	Educational Psych Child Dev

EDU 345	Excpntlty & Clsrm Mgmt
PHAR 110N	Use & Abuse of Drugs
PSYX 345	Child & Adolescent Psych Dis
PSYX 376	Prin Cognit Behav Mod
PSYX 378	Intro to Clinical Psyc
S W 300	Hum Behav & Soc Environ
S W 450	Children and Youth at Risk
SOCI 330	Juvenile Delinquency
Total Hours	12

Minimum Required Grade: C

Gerontology

Select 12 credits from the following:		12
AHHS 325	Introduction to Gerontology	
AHHS 327	MGS Meeting	
AHHS 430	Health Aspects of Aging	
PSYX 233	Fund of Psychology of Aging	
ANTY 426	Culture, Health and Healing	
S W 475	Death, Dying and Grief	
S W 455	Social Gerontology	
Total Hours	12	

Minimum Required Grade: C

Family Development

Select four of the following:		12
COMX 311	Family Communication	
COMX 414	Comm in Personal Relationships	
PSYX 348	Psychology of Family Violence	
S W 423	Addiction Studies	
SOCI 332	Sociology of the Family	
Total Hours	12	

Minimum Required Grade: C

Neuroscience B.S. Cellular and Molecular option

Bachelor of Science - Neuroscience; Cellular and Molecular Concentration

College Humanities & Sciences

Degree Specific Credits: 76

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umd.edu/academics/general-education-requirements>) of the catalog.

Summary

Biology/Psychology Core Courses	25
Other Required Courses	33-34
Additional Major Courses	15
Intersection Courses	1-9
Total Hours	74-83

Biology/Psychology Core Courses

Rule: Must complete all of the following courses:

Note: BCH 110/BCH 111 may be substituted for BIOB 160N/BIOB 161N.

BIOH 458 satisfies the Upper Division Writing Requirement for the Major.

Select one of the following:		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	
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

Minimum Required Grade: C-

Other Required Courses

Rule: Must complete all of the following courses:

Note: PSYX 222 may be substituted for STAT 216.

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	College Physics I	4
PHSX 206N	College Physics I Laboratory	1
PHSX 207N	College Physics II	4
PHSX 208N	College Physics II Laboratory	1
STAT 216 or PSYX 222	Introduction to Statistics Psychological Statistics	3-4
Total Hours		35-36

Minimum Required Grade: C-

Additional Major Courses

Rule: Must 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

Minimum Required Grade: C-

Rule: Choose at least 1 of the following Courses:

Select at least 3 credits from the following: 3

BIOB 301	Developmental Biology	
BIOH 365	Human AP I for Health Profsns	
BIOL 435	Comparative Animal Physiology	

Total Hours 3

Minimum Required Grade: C-

Select at least one of the following: 3

BIOB 375	General Genetics	
BIOB 468	Endocrinology	
BMED 610	Neuropharmacology	
BMED 646	Neurotoxicology	
KIN 330	Motor Learning and Control	
PSYX 356	Human Neuropsychology	

Total Hours 3

Minimum Required Grade: C-

Intersection Courses

Select at least one of the following: 1-9

BIOE 406	Behavior & Evolution	
DANC 345	Teaching for the Disabled	
ECNS 491	Special Topics	
GH 389E	Placebos: The Power of Words	
HTH 430	Health and Mind/Body/Spirit	
LIT 491	Special Topics	
PSYX 233	Fund of Psychology of Aging	

Total Hours 1-9

Minimum Required Grade: C-

Neuroscience B.S. Cognitive Neuroscience option

Bachelor of Science - Neuroscience; Cognitive Neuroscience Concentration

College Humanities & Sciences

Degree Specific Credits: 70

Required Cumulative GPA: 2.0

Catalog Year: 2016-2017

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umd.edu/academics/general-education-requirements>) of the catalog.

Summary

Biology/Psychology Core Courses	25
Other Required Courses	25-33
Additional Major Courses	16-17
Intersection Courses	1-9
Total Hours	67-84

Biology/Psychology Core Courses

Rule: Must complete all of the following courses:

Note: BIOH 458 satisfies the Upper Division Writing Requirement for the Major.

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
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

Minimum Required Grade: C-

Other Required Courses

Rule: Must complete all of the following courses:

Select one of the following groups:	8-15	
CHMY 121N	Introduction to General Chemistry	
CHMY 123 & CHMY 124	Introduction to Organic and Biochemistry and 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	
M 162	Applied Calculus	4
PHSX 205N	College Physics I	4
PHSX 206N	College Physics I Laboratory	1
PHSX 207N	College Physics II	4
PHSX 208N	College Physics II Laboratory	1
STAT 216	Introduction to Statistics	3-4

or PSYX 222 Psychological Statistics

Total Hours 25-33

Minimum Required Grade: C-

Additional Major Courses

Rule: Must 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

Select at least two of the following: 3-7

BIOB 301	Developmental Biology
BIOH 365	Human AP I for Health Profsns
BMED 610	Neuropharmacology
BMED 646	Neurotoxicology
KIN 330	Motor Learning and Control
PSYX 352	Comparative Psychology

Total Hours 3-7

Minimum Required Grade: C-

Intersection Courses

Select at least one of the following: 1-9

BIOE 406	Behavior & Evolution
DANC 345	Teaching for the Disabled
ECNS 491	Special Topics
GH 389E	Placebos: The Power of Words
HTH 430	Health and Mind/Body/Spirit
LIT 491	Special Topics
PSYX 233	Fund of Psychology of Aging

Total Hours 1-9

Minimum Required Grade: C-

Psychology B.A.

Bachelor of Arts - Psychology

• [Print This Page](#)

College Humanities & Sciences

Degree Specific Credits: 43

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

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 392 and PSYX 398 are limited to 3 credit hours.

- PSYX 340, PSYX 360, and PSYX 390 may only count once.
- PSYX 390 is limited to 3 credit hours.

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

Lower Core Courses	10
Foundation Courses	12
Fundamentals Courses	6
Upper Division Electives	15
Math Electives	3-4
Total Hours	46-47

Lower Core Courses

Rule: Must complete all of the following courses

PSYX 100S	Intro to Psychology	3
PSYX 120	Research Methods I	3
or SOCI 318	Sociological Research Methods	
PSYX 222	Psychological Statistics	3
Total Hours		9

Minimum Required Grade: C

Foundation Courses

Select four of the following: 12

PSYX 230	Developmental Psychology
PSYX 233	Fund of Psychology of Aging
PSYX 340	Abnormal Psychology
PSYX 360	Social Psychology
PSYX 385	Psychology of Personality
Total Hours	12

Minimum Required Grade: C

Fundamentals Courses

Select two of the following: 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.

Select five of the following:	15
COUN 485	Counseling Theories

PSYX 320	Research Methods III	
PSYX 340	Abnormal Psychology (may only count once)	
PSYX 345	Child & Adolescent Psych Dis	
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	Prin Cognit Behav Mod	
PSYX 378	Intro to Clinical Psyc	
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 406	Rural Integrated Behavioral Health Care for Montana	
PSYX 491	Special Topics	
PSYX 494	Seminar/Workshop	
S W 423	Addiction Studies	
Total Hours		15

Minimum Required Grade: C

Math Electives

Select one of the following:		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

Psychology Minor

Minor - Psychology (Minor)

College Humanities & Sciences

Degree Specific Credits: 21

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Summary

Lower Division Core Requirements	7
Minor Electives	12
Subcategory 1	

Subcategory 2	
Subcategory 3	
Additional Electives	2
Total Hours	21

Lower Division Core Requirements**Rule:** Must complete the following courses

PSYX 100S	Intro to Psychology	3
PSYX 120	Research Methods I	3
Total Hours		6

Minimum Required Grade: C

Minor Electives**Rule:** Complete the following subcategories, taking at least 6 upper division credits

Minimum Required Grade: C

12 Total Credits Required

Subcategory 1

Select one of the following: 3

PSYX 230	Developmental Psychology	
PSYX 360	Social Psychology	
PSYX 385	Psychology of Personality	
Total Hours		3

Minimum Required Grade: C

Subcategory 2

Select one of the following: 3

PSYX 340	Abnormal Psychology	
PSYX 345	Child & Adolescent Psych Dis	
PSYX 376	Prin Cognit Behav Mod	
PSYX 378	Intro to Clinical Psyc	
Total Hours		3

Minimum Required Grade: C

Subcategory 3

Select two of the following: 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

Minimum Required Grade: C

Additional Electives**Rule:** Must complete additional Psychology electives to achieve 21 degree credits

Minimum Required Grade: C

2 Total Credits Required

Teaching Psychology Track

A teaching minor is an academic minor which may contain different course requirements designed to meet state standards. Those interested in teaching in K-12 schools must complete a teaching major in a content area plus the teacher preparation program through the Department of Teaching and Learning. Additional teaching areas can be added through completion of either a teaching major or a teaching minor in that content area.

- Secondary Education Licensure Program (<http://www.coehs.umt.edu/departments/currinst/undergradprograms/seced/default.php>)
- Licensure Degree Requirements (p. 101)

The term 'minor' for this teaching option refers to courses that need to be completed. To sign up for this option, you need to contact the Teaching and Learning Department. Do not fill out a minor form for graduation or the minor section of the major change form. Approvals for this option must come from the Teaching and Learning Department.

Teaching Licensure Requirements

Note: Individuals completing a teaching minor must also complete a teaching major in another content area. Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Teaching and Learning (p. 95) in the College of Education and Human Sciences for more information. A minor GPA of 2.75 is required to be eligible for student teaching.

Teaching Methods Course

Rule: Complete the following course.

Note: The EDU 497 course number is used for multiple courses. Students should register for EDU 497 Methods: 5-12 Social Studies.

EDU 497	Teaching and Assessing	4
Total Hours		4

Minimum Required Grade: C

Sociology Department

Dusten Hollist, 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 three 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.
3. Students interested in rural and environmental issues can pursue an concentration in Rural and Environmental Change.

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. (p. 344)
- Sociology B.A., Criminology Concentration (p. 339)
- Sociology B.A., Inequality and Social Justice Concentration (p. 340)
- Sociology B.A., Rural and Environmental Change Concentration (p. 343)

Undergraduate Minors

- International Developer Studies (p. 342)
- Sociology (p. 345)

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 placement. The criminology cocentration 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 Humanities & Sciences

Degree Specific Credits: 39

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

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 (<http://catalog.umd.edu/academics/general-education-requirements>) of the catalog.

Summary

Core Courses	12
General Sociology Electives	9
Upper Division Writing Course	3
Criminology Concentration	15
Total Hours	39

Core Courses

Rule: All courses are required

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

Select three courses (9 credits) from the list below, two of which must be 300 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
SOCI 441	Capstone: Inequal and Soc Just
SOCI 443	Sociology of Poverty
SOCI 446	Prost & Human Trafficking
SOCI 460	Capstone: Rural and Env Change
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.

Select one of the following:	3
SOCI 438	Seminar in Crime & Deviance
SOCI 441	Capstone: Inequal and Soc Just
SOCI 460	Capstone: Rural and Env Change
SOCI 488	Writing for Sociology
Total Hours	3

Minimum Required Grade: C-

Criminology Concentration

Rule: Complete 15 credits from the following categories

Concentration Core

Note: Students should complete SOCI 211S or SOCI 330, as well as SOCI 221 prior to taking advanced CRIM courses.

SOCI 221	Criminal Justice System	3
SOCI 211S	Introduction to Criminology	3
or SOCI 330	Juvenile Delinquency	
Total Hours		6

Minimum Required Grade: C-

Concentration Electives

Select three of the following:	9
CAS 433	Adv Addiction Studies
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
Total Hours	9

Minimum Required Grade: C-

Inequality and Social Justice

Inequality is at the core of most sociological inquiries. 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 Humanities & Sciences

Degree Specific Credits: 39

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

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 (<http://catalog.umd.edu/academics/general-education-requirements>) of the catalog.

Summary

Core Courses	12
General Sociology Electives	9
Upper Division Writing Course	3
Inequality and Social Justice Concentration	15
Total Hours	39

Core Courses

Rule: All courses are required

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

Select three courses (9 credits) from the list below, two of which must be 300 or above: 9

CAS 433	Adv Addiction Studies	
NRSM 424	Community Forestry & Conservtn	
SOCI 130S	Soc of Alternative Religions	
SOCI 211S	Introduction to Criminology	
or SOCI 330	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	
SOCI 423	Sociology of Corrections	
SOCI 438	Seminar in Crime & Deviance	
SOCI 460	Capstone: Rural and Env Change	
SOCI 470	Environmental 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.

Select one of the following:	3
SOCI 438	Seminar in Crime & Deviance
SOCI 441	Capstone: Inequal and Soc Just
SOCI 460	Capstone: Rural and Env Change
SOCI 488	Writing for Sociology

Total Hours 3

Minimum Required Grade: C-

Inequality and Social Justice Concentration

Rule: Complete 15 credits in the following categories

Minimum Required Grade: C-

Concentration Core

Note: Students should complete SOCI 220S or SOCI 275S first, and complete at least 2 advanced ISJ electives before taking SOCI 441.

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-

Inequality and Social Justice Electives

Note: It is recommended that students take SOCI 442 or SOCI 498 concurrent with SOCI 441.

Select three of the following:	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-

International Development Studies Minor

Minor - International Development Stds (Minor)

College Humanities & Sciences

Degree Specific Credits: 21

Required Cumulative GPA: 2.5

Catalog Year: 2017-2018

Note: At least seven credits must be upper division credits.

Summary

Core Courses		12
Content Courses		9
Total Hours		21

Core Courses

Select at least four of the following: 12

ANTY 333	Culture and Population	
ANTY 349	Social Change in NnWstrn Socts	
ANTY 426	Culture, Health and Healing	
BGEN 360	International Business	
COMX 204X	International & Dvlpmnt Comm	
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

Minimum Required Grade: C-

Content Courses

Select 9 credits from the following: 9

ANTY 326E	Indigenous Peoples & the Ethics of Development	
ANTY 330X	Peoples and Cultures of World (Africa)	
ANTY 333	Culture and Population	
BGEN 160S	Issues in Sustainability	
COMX 415	Intercultural Communication	
COMX 421	Comm in Non-Profit Organizatns	
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	Cultural Ecology	
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 Govt	
PSCI 230X	Intro to International Rel	
PSCI 325	Politics of Latin America	
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

Minimum Required Grade: C-

Rural and Environmental Change

Rural environments, residents and agencies are facing rapid social, economic, demographic and political change. This concentration develops analytical and practical skills for understanding rural and environmental change globally and in the American West, and its policy implications in such areas as rural health, welfare and work; community development and assessment; native peoples and natural resource management. A concentration in rural and environmental change prepares students for employment with either a government, private, or non-profit agency concerned with the above topics or for pursuing an advanced degree in sociology.

Bachelor of Arts - Sociology; Rural and Environmental Change Concentration

College Humanities & Sciences

Degree Specific Credits: 39

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

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 (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

Core Courses	12
General Sociology Electives	9
Upper Division Writing Course	3
Rural and Environmental Change Concentration	15
Total Hours	39

Core Courses

Rule: All courses are required

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

Select three courses (9 credits) from the list below, two of which must be 300 or above: 9

CAS 433	Adv Addiction Studies	
SOCI 130S	Soc of Alternative Religions	
SOCI 211S	Introduction to Criminology	
	or SOCI 330 Juvenile Delinquency	

SOCI 212S	Social Issues Southeast Asia	
SOCI 220S	Race, Gender & Class	
SOCI 221	Criminal Justice System	
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 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 446	Prost & Human Trafficking	
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.

Select one of the following:	3
SOCI 438	Seminar in Crime & Deviance
SOCI 441	Capstone: Inequal and Soc Just
SOCI 460	Capstone: Rural and Env Change
SOCI 488	Writing for Sociology

Total Hours 3

Minimum Required Grade: C-

Rural and Environmental Change Concentration

Rule: Complete 15 credits in the following categories

Minimum Required Grade: C-

Concentration Core

Note: Students should take SOCI 270 first and complete at least 2 Rural and Environmental Change electives prior to taking SOCI 460.

SOCI 270	Intro Development Sociology	3
SOCI 460	Capstone: Rural and Env Change (May substitute SOCI 441 with consent of instructor)	3

Total Hours 6

Minimum Required Grade: C-

Concentration Electives

Select three of the following:		9
NRSM 424	Community Forestry & Conservtn	
SOCI 346	Rural Sociology	
SOCI 350	The Community	
SOCI 355	Population and Society	
SOCI 443	Sociology of Poverty	
SOCI 470	Environmental Sociology	
SOCI 471	Gender and Global Development	
SOCI 498	Internship	
Total Hours		9

Minimum Required Grade: C-

Sociology B.A.**General Sociology Major**

Students whose primary interest is in a general sociology major are urged to develop a plan of study with their advisor; they must take three electives in addition to the core courses and major content requirements listed above. Any sociology course, including courses from any of the three 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 a graduate program in sociology. It also provides valuable preparation for related fields such as law, social work, education, counseling, politics, and public administration.

Bachelor of Arts - Sociology**College Humanities & Sciences**

Degree Specific Credits: 39

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018**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 (<http://catalog.umd.edu/academics/general-education-requirements>) of the catalog.

Summary

Core Courses	12
General Sociology Elective	24
Upper Division Writing Course	3
Total Hours	39

Core Courses**Rule:** All courses are required

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

Select 24 credits from the following:		24
CAS 433	Adv Addiction Studies	
NRSM 424	Community Forestry & Conservtn	
SOCI 130S	Soc of Alternative Religions	
SOCI 211S	Introduction to Criminology	
	or SOCI 330 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	
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 460	Capstone: Rural and Env Change	
SOCI 470	Environmental Sociology	
SOCI 471	Gender and Global Development	
SOCI 485	Political Sociology	
SOCI 488	Writing for Sociology	
SOCI 498	Internship	
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.

Select one of the following:		3
SOCI 438	Seminar in Crime & Deviance	

SOCI 441	Capstone: Inequal and Soc Just	
SOCI 460	Capstone: Rural and Env Change	
SOCI 488	Writing for Sociology	
Total Hours		3

Minimum Required Grade: C-

Teaching Sociology Track

Individuals interested in teaching in K-12 schools must complete a degree in the content area they want to teach plus the teacher preparation program through the Department of Teaching and Learning. Individuals must complete the teaching major/teaching track within that degree program, which may contain different course requirements than the academic major since the sequence of courses is designed to meet state standards. Upon completion of the degree program with the teaching track and the secondary licensure program, one will be eligible for a standard Montana teaching license in this content area.

- Secondary Education Licensure Program (<http://www.coehs.umt.edu/departments/currinst/undergradprograms/seced/default.php>)
- Licensure Degree Requirements (p. 101)

Teacher Preparation in Sociology

Students who want to be licensed to teach sociology at the high school level must complete the BA degree requirements in sociology (general sociology, no option required). They also must complete a teaching major or minor in a second field of their choice and the professional licensure program in the College of Education. Students may also earn a teaching minor in sociology. See the Department of Teaching and Learning (p. 95) for information about admission to the Teacher Education Program and completion of these licensure programs.

The term 'minor' for this teaching option refers to courses that need to be completed. To sign up for this option, you need to contact the Curriculum and Instruction Department. Do not fill out a minor form for graduation or the minor section of the major change form. Approvals for this option must come from the Curriculum and Instruction Department.

Tracks will not appear on your UM transcript, diploma, university lists, student data system, or university publication and are used for advising purposes only. You do not fill out a major change for a track.

Teaching Licensure Requirements

Note: Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Teaching and Learning (p. 95) in the College of Education and Human Sciences for more information. A major GPA of 2.75 is required to be eligible for student teaching. This major does not qualify as a single field endorsement. Individuals must complete a second teaching major or minor in another content area.

Teaching Methods Course

Rule: Complete the following course.

Note: The EDU 497 course number is used for multiple courses. Students should register for EDU 497 Methods: 5-12 Social Studies.

EDU 497	Teaching and Assessing	4
Total Hours		4

Minimum Required Grade: C-

Sociology Minor

Minor - Sociology (Minor)

College Humanities & Sciences

Degree Specific Credits: 21

Required Cumulative GPA: 1.7

Catalog Year: 2017-2018

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

Core Courses	9
General Sociology Electives	12
Total Hours	21

Core Courses

Rule: All courses are required

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

Select four of the following: 12

NRSM 424	Community Forestry & Conservtn	
SOCI 130S	Soc of Alternative Religions	
SOCI 211S	Introduction to Criminology or SOCI 330 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 460	Capstone: Rural and Env Change	
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

A teaching minor is an academic minor which may contain different course requirements designed to meet state standards. Those interested in teaching in K-12 schools must complete a teaching major in a content area plus the teacher preparation program through the Department of Teaching and Learning. Additional teaching areas can be added through completion of either a teaching major or a teaching minor in that content area.

- Secondary Education Licensure Program (<http://www.coehs.umt.edu/departments/currinst/undergradprograms/seced/default.php>)
- Licensure Degree Requirements (p. 101)

The term 'minor' for this teaching option refers to courses that need to be completed. To sign up for this option, you need to contact the Teaching and Learning Department. Do not fill out a minor form for graduation or the minor section of the major change form. Approvals for this option must come from the Teaching and Learning Department.

Teaching Licensure Requirements

Note: Individuals completing a teaching minor must also complete a teaching major in another content area. Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Teaching and Learning (p. 95) in the College of Education and Human Sciences for more information. A minor GPA of 2.75 is required to be eligible for student teaching.

Teaching Methods Course

Rule: Complete the following course.

Note: The EDU 497 course number is used for multiple courses. Students should register for EDU 497 Methods: 5-12 Social Studies.

EDU 497	Teaching and Assessing	4
Total Hours		4

Minimum Required Grade: C-

South and Southeast Asian Studies

Ruth Vanita, Director

The Global Humanities and Religions Program offers undergraduates at the University of Montana-Missoula an opportunity to study South and Southeast Asian peoples, cultures, histories, and societies, as well as their literary, artistic and religious traditions. The region includes India, Nepal, Bhutan, Tibet, Sri Lanka, Pakistan, Bangladesh, Myanmar (Burma), Thailand, Laos, Cambodia, Vietnam, Malaysia, Brunei, Singapore, Indonesia, East Timor, and the Philippines.

The South Asianist faculty of Global Humanities and Religions and the Dean of the College of Humanities and Sciences work closely with those faculty from other disciplines at the University of Montana who have research and teaching interests in the area, and competence in regional languages.

Students may choose to minor in South and Southeast Asia with a major in any discipline. They must register with Professor Ruth Vanita, the advisor, and are encouraged to plan their course sequence at least one semester in advance, in consultation with an assigned core faculty advisor from those listed below.

Undergraduate Minors

- South and Southeast Asian Studies Minor (p. 346)

South and Southeast Asian Studies Minor

Minor - South & Southeast Asian Stds (Minor)

College Humanities & Sciences

Degree Specific Credits: 18

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Summary

SSEA Minor Lower Division Requirements	9
Introductory Course	
Lower Division Electives	
SSEA Minor Upper Division Requirements	9
SSEA Humanities courses	
SSEA Social Sciences courses	
Total Hours	18

SSEA Minor Lower Division Requirements

Rule: Complete the following subcategories of courses

Note: All substitutions must be approved by the SSEA faculty director. A language is not required. But up to 6 credits of Hindi language (any level) may count towards the total credits for the minor.

Minimum Required Grade: C-

9 Total Credits Required

Introductory Course

Complete any one of the following courses:	3
SSEA 202X Introduction to India	
Total Hours	3

Minimum Required Grade: C-

Lower Division Electives**Rule:** Choose 2 of the following courses

Select two of the following:	6
GH 191 Special Topics	
SSEA 202X Introduction to India	
SSEA 232H Buddhism	
SSEA 234X Hindu Religious Traditions	
Total Hours	6

Minimum Required Grade: C-

SSEA Minor Upper Division Requirements**Note:** All substitutions must be approved by the SSEA director

Minimum Required Grade: C-

9 Total Credits Required

Select 9 credits from the following courses or any other electives that may be offered or approved by the Program	9
GH 326 Stories East and West	
GH 328L Gender Sexuality India	
GH 415 Same Sex Unions Literature	
GH 316E Talking to God: Bhagavad Gita	
SSEA 342 Topics Comparative Lit & Rel	
SSEA 366 Tibetan Civilization	
SSEA 368 Contemporary Buddhism in SSEA	
SSEA 330X Peoples and Cultures of World	
Total Hours	9

Minimum Required Grade: C-

Women's, Gender and Sexuality Studies

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 and Gender 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 Steering 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 option or minor requirements and supervise their program.

Undergraduate

- Women's, Gender & Sexuality Studies B.A. (p. 347)

Undergraduate Minors

- Women's, Gender & Sexuality Studies (p. 348)

Women's, Gender and Sexuality Studies B.A.**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 Humanities & Sciences**

Degree Specific Credits: 33

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018**General Education Requirements**

Information regarding these requirements can be found in the General Education Section (<http://catalog.umd.edu/academics/general-education-requirements>) of the catalog.

Summary

Required Courses	15
Electives	18
Humanities Core	
Social Science Core	
Total Hours	33

Required Courses

Rule: Take all of the following courses.

GH 151L	Introduction to Western Humanities Antiquity	3
WGSS 163L	Hist/Lit Persp Women	3
WGSS 263S	Social and Political Perspectives on Women, Men, and Sexuality	3
WGSS 363	Feminist Theory and Methods	3
WGSS 463	WGS Capstone	2
Total Hours		14

Minimum Required Grade: C-

Electives

Rule: Additional Elective WGSS Credits (18 credits (11 credits must be UD))

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.

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 Core

Select 9 credits from the following: 9

COMX 380	Gender and Communication
COMX 447	Rhetorical Construction of Women
COMX 449	Rhetoric of Women's Activism
GH 329	Fathers and Daughters in Western Literary Traditions
HSTA 370H	Wmn Amer Colonial to Civil War
HSTA 371H	Wmn Amer Civil War to Present
HSTA 385	Families & Children in America
RLST 370	Mysticism

Total Hours 9

Minimum Required Grade: C-

Social Science Core

Select 9 credits from the following: 9

ANTY 427	Anthropology of Gender
COUN 242S	Intimate Relationships
COUN 485	Counseling Theories
PSYX 348	Psychology of Family Violence
S W 323	Women & Soc Action Amer
SOCI 220S	Race, Gender & Class
SOCI 275S	Gender and Society
SOCI 332	Sociology of the Family
SOCI 441	Capstone: Inequal and Soc Just

SOCI 443	Sociology of Poverty
SOCI 471	Gender and Global Development
WGSS 250	Media Representations of Women, Men, and Sexuality

Total Hours 9

Minimum Required Grade: C-

Women's, Gender and Sexuality Studies Minor

Minor - Women's, Gender & Sexuality St (Minor)

College Humanities & Sciences

Degree Specific Credits: 20

Required Cumulative GPA: 1.7

Catalog Year: 2017-2018

Summary

Course List	Course List	Hours
Code	Title	
	Lower Division Core Requirements	3
	Upper Division Core Requirements	5
	Approved Elective Courses	12
Total Hours		20

Lower Division Core Requirements

Course List	Course List	Hours
Code	Title	
WGSS 163L	Hist/Lit Persp Women	3
	or WGSS 263S Social and Political Perspectives on Women, Men, and Sexuality	
Total Hours		3

Minimum Required Grade: C-

Upper Division Core Requirements

Course List	Course List	Hours
Code	Title	
WGSS 363	Feminist Theory and Methods	3
WGSS 463	WGS Capstone	2
Total Hours		5

Minimum Required Grade: C-

Approved Elective Courses

Rule: Additional 12 credits of Women's and Gender Studies, at least one of which is Upper Division (300-400 level)

Note: WGSS 392, WGSS 398 and WGSS 492 (Internship/Independent Study) may be applied toward these credits

Minimum Required Grade: C-

12 Total Credits Required

School of Journalism

Larry Abramson, Dean

Dennis Swibold, Director of Faculty Affairs

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 (p. 350) and a
- Minor in Journalism (p. 350).

Students select courses in writing, reporting, producing, directing, editing and still and video photography. They train to work across multiple platforms including online, audio, video, newspaper and magazine.

A quality education in journalism is built on a strong liberal arts foundation. Students at the pre-professional level are required to take courses outside journalism, including courses in Political Science, Business/Economics and History. They must complete the University's general education requirements as well.

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

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

Pre-Professional Program

In the first three or four semesters of study students are enrolled in pre-journalism and take courses in the major and in the liberal arts and sciences. Journalism courses in the pre-professional curriculum must be taken at University of Montana-Missoula, though the directors may occasionally accept substitutes taught at another schools with programs accredited by the Accrediting Council for Education in Journalism and Mass Communications. All non-journalism courses in the curriculum may be completed at any college or university if transfer credits are accepted by UM. Students may enter the pre-professional program during either autumn or spring semester.

Professional Program

Students may apply for admission to the professional program in Journalism once they have successfully completed the pre-professional curriculum. Applications are accepted in autumn and spring. Deadlines for applications are the last Monday of September and February.

Students may apply for admission to the professional program in either semester, but they must have completed at least 45 credits before applying. In addition, applicants must have either completed all courses

listed in the pre-professional curriculum or be taking the courses needed to complete the requirements during the semester in which they apply.

An overall grade point average of 2.5, and a GPA of at least 2.5 in the journalism core courses, is required of applicants.

Completed applications are evaluated by the School of Journalism directors and acceptances are made by the dean based on the director's recommendations. The primary admissions criteria are grade point averages, both overall and in the pre-professional program, and progress in completing the pre-professional curriculum. Successful applicants will have demonstrated, among other qualities, promise and professional aptitude through the quality of their course work and their overall performance in the pre-professional program, and will have demonstrated an interest in pursuing a career in journalism. Students with deficiencies in these requirements may on occasion be admitted provisionally. Once deficiencies are removed the student will be given full admission status.

Applications for admission to the professional programs may be obtained online at the School's website. A \$15 nonrefundable application fee and transcripts of all academic work must accompany the application. Admission for one academic year cannot be deferred to another academic year without the written consent of the academic director.

Students transferring from other ACEJMC-accredited programs may be admitted on a space available basis. Transfer credit for pre-professional and professional courses taken at other institutions is accepted only for those courses that are deemed equivalent and in which a letter grade of C or better is obtained.

Academic Progression

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

Students enrolled in the professional journalism program must maintain satisfactory academic progress. Admission to the professional program requires a cumulative grade average of 2.5 and a pre-journalism course average of 2.5. Any student who has been admitted and whose grade average subsequently falls below a 2.5 must meet with his or her adviser to discuss the student's progress before classes resume the following semester. A student in the professional program who has a cumulative or professional grade point average less than 2.0 will be suspended from the program.

A student dismissed from the program for substandard performance will not be readmitted, except in cases where substantiation is made to the faculty, by written petition, that the substandard performance was the result of circumstances that no longer exist, or that the student has demonstrated the capability and desire to perform satisfactory work since dismissal from the program.

A student leaving the journalism professional program for any reason, whether in good standing or on academic suspension, must reapply for admission.

Journalism Undergraduate

- Journalism B.A. (p. 350)

Undergraduate Minors

- Journalism (p. 350)

Journalism B.A.

Bachelor of Arts - Journalism

School of Journalism

Degree Specific Credits: 37

Required Cumulative GPA: 2.5

Catalog Year: 2017-2018

Note: Degree Specific Requirements: must complete at least 37 and no more than 48 JRNL credits. Students must complete at least 72 total credits outside of Journalism. 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 (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

Pre-Journalism Courses	12
Core Requirements	
Writing Course - Introductory and General Education Courses	18
Journalism Professional Program	7-8
Journalism Upper Division Electives	15
Total Hours	52-53

Pre-Journalism Courses

Rule: 2.5 overall GPA and 2.5 GPA in pre-journalism core.

Note: The lower division core must be completed prior to admission to the School of Journalism professional program.

Core Requirements

Note: Must complete these courses in order to apply to the professional programs.

JRNL 100H	Media History and Literacy	3
JRNL 170	Elements of News Writing (Prerequisite for JRNL 270)	3
JRNL 257	Beginning Visual Journalism	3
JRNL 270	Reporting	3
Total Hours		12

Minimum Required Grade: C-

Writing Course and General Education

WRIT 101	College Writing I	3
General Education Courses		15
Total Hours		18

Journalism Professional Program

Rule: Complete all courses.

Note: Must also complete 1 capstone course as designated by the faculty.

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-

Journalism Upper Division Electives

Select five of the following: 15

JRNL 328	Intermediate Photojournalism	
JRNL 330	News Editing	
JRNL 331	Intermediate Web Reporting	
JRNL 340	Intermediate Audio	
JRNL 350	Intermediate Video Photography	
JRNL 351	Intermediate Video Directing	
JRNL 352	Intermediate Video Reporting and Production	
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 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	
Total Hours		15

Minimum Required Grade: C-

Journalism Minor

Minor - Journalism (Minor)

School of Journalism

Degree Specific Credits: 21

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Summary

Core Courses	18
Additional courses	3
Total Hours	21

Core Courses

Rule: Must 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

Minimum Required Grade: C-

Additional courses

Note: Must complete 1 additional JRNL upper-division elective.

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 (<http://www.umt.edu/law>).

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 (<http://www.umt.edu/law/academics/academic-calendar/default.php>).

Required Curriculum

First Year		
LAW 500	Civil Procedure I	3
LAW 502	Contracts I	3
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 I	3
LAW 510	Criminal Law	3
LAW 512	Torts I	2
LAW 550	Property I	2
	Hours	22
Second Year		
LAW 552	Federal Tax (May be taken Second or Third year)	3
LAW 554	Business Organizations	3
LAW 555	Professional Responsibili	3
LAW 556	Business Transactions	2
LAW 557	Trial Practice	2
LAW 558	Constitutional Law	4
LAW 560	Evidence	3
	Hours	20
Third Year		
LAW 600	Clinical Trng III	1-6
LAW 601	Clinical Trng IV	1-6
	Hours	0
	Total Hours	42

Elective Courses

(Offerings vary year to year)

LAW 665	Administrative Law	3
LAW 507	Global Perspectives on Law	5
LAW 511	Criminal Procedure	3
LAW 520	Wild Life Law	2
LAW 522	Domestic Violence	2
LAW 523	Juvenile 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	3
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	3
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	1
LAW 634	Public International Law	3
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	3
LAW 643	Am Ind Cult Religion Freedom	3
LAW 644	White Collar Crime	2
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	2
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	2
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

Maureen and Mike Mansfield Center

Abraham Kim, Director

The Maureen and Mike Mansfield Center was established in 1986 to pay tribute to Maureen and Mike Mansfield and to recognize their important contributions to U.S. Asian relations and public policy. The Center is an academic unit within the University of Montana and receives core funding from an endowment managed by the Maureen and Mike Mansfield Foundation. Mansfield Center faculty offer classroom instruction, conduct research, provide training for Asian and U.S. government personnel, and organize various types of conferences, all with a focus on East Asia. The Center faculty collaborate with the University's Asian Studies Program and several other campus units.

The Mansfield Center's Ethics and Public Affairs Program (formerly known as the Center for Ethics) focuses upon the relationship of values to public institutions and affairs. Its courses, seminars, lectures, conferences, and internships examine the role that ethical values can and should play in public life, moral quandaries faced by those who govern philosophical and practical dimensions of political ethics, and issues of leadership and character in public service.

Course Descriptions

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 Montana's Maureen and Mike Mansfield Center) provides intensive language and culture training for members of the National Guard, Reserve, and Active Duty utilizing a congressionally funded Language Training Center (LTC) contract through the Department of Defense Language and National Security Education Office (DLNSEO)? Grant title: Subaward 2013-LTC-Montana (H98210-13-2-0001). This DCLCP course is designed to meet DoD (Department of Defense) total force Korean language training needs, especially members of the 1st Special Forces Group (Joint Base Lewis McChord, WA) in order to enable the DoD workforce to be better prepared and equipped with the target language, cultural and regional expertise. As a part of DoD Language Training Center, the course is open exclusively for U.S. DoD personnel who would not otherwise enroll into other UMT language course.

Nonetheless, we encourage the students to pursue a degree in programs like Eastern Asian Studies, Asian Studies, or political science offered by the University of Montana.

MANS 108 - Elementary Chinese I. 5 Credits.

The Defense Critical Language and Culture Program's Elementary I is an intensive 120-hour, 30 hours per week course (with 5 hours dedicated to culture and regional studies in English), equivalent to 6 months of college language courses. The course is for Special Forces military students who have previous language training in Chinese language, yet whose skills may have eroded somewhat due to insufficient practice. Students are admitted into the elementary Chinese-Mandarin class if they currently perform at either 0 or 0+ on the Interagency Language Roundtable (ILR) scale. In class, the target language is used exclusively when teaching the language, with no English permitted (unless in a case of an emergency when the Chinese word is unknown). Standard Chinese or Modern Standard Chinese (MSC), also known as Mandarin, Putonghua and Guoyu is the official language of the People's Republic of China, the Republic of China (Taiwan) and one of the four official languages of Singapore. Due to the complexities of this language, the Defense Language Institute categorized MSC as Category IV language, one of the toughest languages to learn for non-native speakers. The majority of the class will be conducted via Video Tele Conferencing (VTC); the remaining portion of the class will be in residence. In order to create communicative and task-based and skill-integration activities in improving students' overall language proficiency level, additional tutoring, counseling and coaching will also be conducted.

MANS 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 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 Montana's Maureen and Mike Mansfield Center) provides intensive language and culture training for members of the National Guard, Reserve, and Active Duty utilizing a congressionally funded Language Training Center (LTC) contract through the Department of Defense Language and National Security Education Office (DLNSEO)? Grant title: Subaward 2013-LTC-Montana (H98210-13-2-0001). This DCLCP course is designed to meet DoD (Department of Defense) total force Korean language training needs, especially members of the 1st Special Forces Group (Joint Base Lewis McChord, WA) in order to enable the DoD workforce to be better prepared and equipped with the target language, cultural and regional expertise. As a part of DoD Language Training Center, the course is open exclusively for U.S. DoD personnel who would not otherwise enroll into other UMT language course.

Nonetheless, we encourage the students to pursue a degree in programs like Eastern Asian Studies, Asian Studies, or political science offered by the University of Montana.

MANS 208 - Intermediate Chinese I. 5 Credits.

The Defense Critical Language and Culture Program's Intermediate I is an intensive 120-hour, 30 hours per week course (with 5 hours dedicated to culture and regional studies), equivalent to 6 months of college language courses. The course is for Special Forces military students who have previous language training in Chinese language, yet whose skills may have eroded somewhat due to insufficient practice. Students are admitted into the elementary Chinese-Mandarin class if they currently perform at either 1 or 1+ on the Interagency Language Roundtable (ILR) scale. In class, the target language is used exclusively, with no English permitted (unless in a case of an emergency when the Chinese word is unknown). Standard Chinese or Modern Standard Chinese (MSC), also known as Mandarin, Putonghua and Guoyu is the official language of the People's Republic of China, the Republic of China (Taiwan) and one of the four official languages of Singapore. Due to the complexities of this language, the Defense Language Institute categorized MSC as Category IV language, one of the toughest languages to learn for non-native speakers. The majority of the class will be conducted via Video Tele Conferencing (VTC); the remaining portion of the class will be in residence. In order to create communicative and task-based and skill-integration activities in improving students' overall language proficiency level, additional tutoring, counseling and coaching will also be conducted.

MANS 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 Montana's Maureen and Mike Mansfield Center) provides intensive language and culture training for members of the National Guard, Reserve, and Active Duty utilizing a congressionally funded Language Training Center (LTC) contract through the Department of Defense Language and National Security Education Office (DLNSEO). Grant title: Subaward 2013-LTC-Montana (H98210-13-2-0001). This DCLCP course is designed to meet DoD (Department of Defense) total force Korean language training needs, especially members of the 1st Special Forces Group (Joint Base Lewis McChord, WA) in order to enable the DoD workforce to be better prepared and equipped with the target language, cultural and regional expertise. As a part of DoD Language Training Center, the course is open exclusively for U.S. DoD personnel who would not otherwise enroll into other UMT language course. Nonetheless, we encourage the students to pursue a degree in programs like Eastern Asian Studies, Asian Studies, or Political Science offered by the University of Montana.

MANS 308 - Advanced Chinese I. 5 Credits.

The Defense Critical Language and Culture Program's Advanced I is an intensive 120-hour, 30 hours per week (with 5 hours dedicated to culture and regional studies in the target language), equivalent to 6 months of college language courses. The course is for Special Forces military students who have previous language training in Chinese language, yet whose skills may have eroded somewhat due to insufficient practice. Students are admitted into the advanced Chinese-Mandarin class if they currently perform at either 2 or 2+ on the Interagency Language Roundtable (ILR) scale. In class, the target language is used exclusively, with no English permitted (unless in a case of an emergency when the Chinese word is unknown). Standard Chinese or Modern Standard Chinese (MSC), also known as Mandarin, Putonghua and Guoyu is the official language of the People's Republic of China, the Republic of China (Taiwan) and one of the four official languages of Singapore. Due to the complexities of this language, the Defense Language Institute categorized MSC as Category IV language, one of the toughest languages to learn for non-native speakers. The majority of the class will be conducted via Video Tele Conferencing (VTC); the remaining portion of the class will be in residence. In order to create communicative and task-based and skill-integration activities in improving students' overall language proficiency level, additional tutoring, counseling and coaching will also be conducted.

MANS 395 - Special Topics. 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

East Asian Studies

Undergraduate

- East Asian Studies B.A. (p. 217)

The Maureen and Mike Mansfield Library

Shali Zhang, Dean of Libraries

The Maureen and Mike Mansfield Library at the University of Montana provides an array of information resources and services in support of the 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.

Missoula College

Shannon O'Brien, Dean

Clint Reading, Associate 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 3639 South Avenue West,
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 East Campus. All business technology programs, applied computing and engineering technology programs, culinary arts programs, health professions programs, as well as a branch of the Mansfield Library, The Bookstore at the Missoula College, and a dining room are located on the East Campus. All industrial technology programs are located on the West Campus.

Students may attend courses at four campus sites and online. Courses are scheduled at a variety of times between 7 a.m. and 10 p.m., Monday through Saturday. The Missoula College Dean's Office, department chairs and/or program directors may be contacted for specific program and scheduling information.

Bachelor of Applied Science Degree Program

A Bachelor of Applied Science (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 degrees from accredited institutions and who wish to continue toward completing a baccalaureate degree. For more information, see the Bachelor of Applied Science (p. 162) 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. (p. 162) 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 (p. 7) 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

Josef Crepeau, 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 (p. 162)
- Associate of Arts ("General A.A.") (p. 356)
- Associate of Arts (A.A.) with a Concentration in Communication Studies (p. 357)
- Associate of Arts (A.A.) with a Concentration in Professional Communication (p. 359)

Associate of Arts (A.A.)

The Department of Applied Arts and Sciences offers the Associate of Arts degree. The Associate of Arts degree is considered a general education transfer degree and does not include a major or minor course of study. To receive an Associate of Arts degree, students must:

- successfully complete all lower-division general education requirements with a letter grade of C- or better;
- earn a minimum of 60 credits, at least 30 of which must be from UM;
- and maintain an institutional cumulative GPA of 2.00 for all UM courses taken for a traditional letter grade (A-F).

Matriculating students may begin coursework in the autumn, spring or summer. Courses numbered below 100 do not count toward the 60 credit requirement or general education course requirements, but do fulfill financial aid credit load requirements.

Students planning on completing a baccalaureate degree are encouraged to select specific general education courses and electives that meet the requirements for that future major. Students work with their advisor to develop an AA degree plan to best prepare them to transition to a four-year degree.

Pathways within the Associate of Arts Degree

Although the AA does not include a major or minor course of study, students may elect to choose classes in a specific area of interest. Recognized pathways within the Associate of Arts degree include:

- Chemical and Addiction Studies
- Business
- Communication Studies
- Health IT
- Professional Communication
- Sociology
- For individuals attending the Montana Law Enforcement Academy, a specialized Associate of Arts degree is offered through a collaboration among Missoula College UM, the University of Montana Department Of Sociology, and the Montana Law Enforcement Academy in Helena, MT.

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 communication studies, an area of increasing demand to employers. Unlike areas of emphasis, these concentrations are recorded on the student's transcript a concentration of the AA degree itself.

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: 2017-2018

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

Mathematics	3-4
Perspectives	21-27
Expressive Arts	
Historical & Cultural Studies	
Literary & Artistic Studies	
Social Sciences	
Ethical & Human Values	
Democracy and Citizenship Perspectives	
Cultural and International Diversity Perspectives	
Natural Sciences	
Writing Skills	6
AA Degree Electives	13-27
Total Hours	43-64

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.

Note: Some courses satisfy multiple Perspectives or GER Categories; visit with your advisor for more information. Students who take the maximum number of Perspective "double-dippers" possible will be able to complete the Perspectives with a total of 21 credits.

Minimum Required Grade: C-

21-27 Total Credits Required

Expressive Arts (A)

Rule: A minimum of three credits is required.

Literary & Artistic Studies (L)

Rule: A minimum of three credits is required.

Historical & Cultural Studies (H)

Rule: A minimum of three credits is required.

Social Sciences (S)

Rule: A minimum of three credits is required.

Ethical & Human Values (E)

Rule: A minimum of three credits is required.

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.

WRIT 101	College Writing I	3
or WRIT 201	College Writing II	

Minimum Required Grade: C-

Lower-Division Approved Writing Course

Rule: Any course designated as an Approved Writing Course during semester it's taken.

AA Degree Electives

Rule: Number of elective credits required varies; student needs to ensure s/he earns at least 60 total credits for the AA degree.

Note: Transfer students may count up to 30 transfer credits towards the total 60 necessary for degree. A maximum of 15 technical credits may be counted towards the total 60. (A student may use 20 technical credits towards the 60 if s/he has earned an AAS degree.)

13-27 Total Credits Required

Health Care Informatics Track Requirements

Rule: All courses are required

This is an advising track only and not an official program as recognized by the University of Montana (UM) or the Montana University System. This information will not appear on your UM transcript, diploma, university lists, student data system, or university publication. You do not fill out a major change for a track.

AHMS 144	Medical Terminology	3
CSCI 105	Computer Fluency	3
CSCI 110	Programming - VB I	3
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 165	OS Commands and Scripts	3
ITS 210	Network OS - Desktop	3
ITS 280	Computer Repair & Maint.	3
ITS 289	Professional Certification	1
Total Hours		34

Minimum Required Grade: C-

Associate of Arts (A.A.) with a Concentration in Communication Studies

Associate of Arts - General AA; Communication Studies Concentration

Missoula College

Degree Specific Credits: 60

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

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 and Concentration in Communication Studies, a student must complete the requirements specific to that degree.

Summary

Degree Specific Requirements	15
Organizational Communication or Rhetorical Theory	
Statistics	
Communication Elective	
Mathematics	3
Writing Skills	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
Total Hours	55-75

Degree Specific Requirements for AA with an Option in Communication Studies

Rule: All courses required

Note: Some courses required for the Associate of Arts with an Option in Communication Studies satisfy multiple Perspectives or GER Categories; visit with your advisor for more information.

COMX 111A	Intro to Public Speaking	3
COMX 115S	Introduction to Interpersonal Communications	3
COMX 140L	Intro to Visual Rhetoric	3
M 115	Probability and Linear Mathematics	3
WRIT 101	College Writing I	3
Total Hours		15

Minimum Required Grade: C-

Organizational Communication or Rhetorical Theory

Rule: Take one of the following

COMX 220S	Intro to Organizational Comm	3
	or COMX 240H Intro to Rhetorical Theory	
Total Hours		3

Minimum Required Grade: C-

Statistics

Note: Completion of one of these courses satisfies the Symbolic Systems GER category.

Select one of the following:		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

Rule: Complete 6 credits

Note: Student must select at least two directed elective courses (minimum of 6 credits). Directed electives must be approved by student's advisor.

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 Total Credits Required

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-

3 Total Credits Required

WRIT 101

Rule: Take 1 of the courses below.

Note: Appropriate placement into WRIT 101 required. Prerequisites may apply.

WRIT 101	College Writing I	3
or WRIT 201	College Writing II	

Total Hours	3
-------------	---

Minimum Required Grade: C-

Lower-Division Approved Writing Course

Rule: Any course designated as an Approved Writing Course during semester it's taken.

Perspectives

Rule: A minimum of 3 credits towards each Perspective Category is required.

Note: Some courses satisfy multiple Perspectives or GER Categories; visit with your advisor for more information. Students who take the maximum number of Perspective "double-dippers" possible will be able to complete the Perspectives with a total of 21 credits.

In addition, courses required for the Associate of Arts with an Option in Communication Studies will satisfy applicable Perspectives or GER Categories.

Minimum Required Grade: C-

3 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.

AA Degree Electives

Rule: Number of elective credits required varies; student needs to ensure s/he earns at least 60 total credits for the AA degree.

Note: Transfer students may count up to 30 transfer credits towards the total 60 necessary for degree. A maximum of 15 technical credits may be counted towards the total 60. (A student may use 20 technical credits towards the 60 if s/he has earned an AAS degree.)

Minimum Required Grade: C-

13-27 Total Credits Required

Associate of Arts (A.A.) with a Concentration in Professional Communication

Associate of Arts - General AA; Professional Communication Concentration

Missoula College

Degree Specific Credits: 60

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

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 and Concentration in Professional Communication, a student must complete the requirements specific to that degree.

Summary

Degree Specific Requirements	24
Statistics	
Communication Elective	
Mathematics	3
Writing Skills	6
Perspectives	21-27
Expressive Arts	
Historical & Cultural Studies	
Literary & Artistic Studies	
Social Sciences	
Ethical & Human Values	
Democracy and Citizenship Perspectives	
Cultural and International Diversity Perspectives	
Natural Sciences	
AA Degree Electives	13-27
Total Hours	67-87

Degree Specific Requirements for AA with an Option in Professional Communication

Rule: All courses required

Note: Some courses required for the Associate of Arts with an Option in Professional Communication satisfy multiple Perspectives or GER Categories; visit with your advisor for more information.

COMX 111A	Intro to Public Speaking	3
COMX 115S	Introduction to Interpersonal Communications	3
COMX 140L	Intro to Visual Rhetoric	3
COMX 220S	Intro to Organizational Comm	3
M 115	Probability and Linear Mathematics	3
WRIT 101	College Writing I	3
WRIT 121	Intro to Technical Writing	3
Total Hours		21

Minimum Required Grade: C-

Statistics

Select one of the following:		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

Rule: Complete 3 credits

Note: Student must select at least two directed elective courses (minimum of 6 credits). Directed electives must be approved by student's advisor.

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 Total Credits Required

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.

WRIT 101

Rule: Take 1 of the courses below.

Note: Appropriate placement into WRIT 101/WRIT 201 required. Prerequisites may apply.

WRIT 101	College Writing I	3
or WRIT 201	College Writing II	

Lower-Division Approved Writing Course

Rule: Any course designated as an Approved Writing Course during semester it's taken.

Perspectives

Rule: A minimum of 3 credits towards each Perspective Category is required.

Note: Some courses satisfy multiple Perspectives or GER Categories; visit with your advisor for more information. Students who take the maximum number of Perspective "double-dippers" possible will be able to complete the Perspectives with a total of 21 credits.

In addition, courses required for the Associate of Arts with an Option in Communication Studies will satisfy applicable Perspectives or GER Categories.

Minimum Required Grade: C-

3 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.

AA Degree Electives

Rule: Number of elective credits required varies; student needs to ensure s/he earns at least 60 total credits for the AA degree.

Note: Transfer students may count up to 30 transfer credits towards the total 60 necessary for degree. A maximum of 15 technical credits may be counted towards the total 60. (A student may use 20 technical credits towards the 60 if s/he has earned an AAS degree.)

Minimum Required Grade: C-

13-27 Total Credits Required

Applied Computing and Engineering Technology

Xueying Shen, Chairperson

The Department of Applied Computing and Engineering Technology collaborates with business and industry to prepare graduates to compete in and contribute to a diverse and dynamic global society. Students acquire the practical skills necessary to pursue entry-level careers in STEM-related (Science, Technology, Engineering, and Mathematics) occupations. Students engage in experiential learning, embracing technical education, effective communication, problem solving, professionalism, and specific workplace skills. The department promotes lifelong learning to empower students in an ever-changing world. More details on programs available through the department can be found at the Applied Computing and Engineering Technology website. (<http://mc.umt.edu/acet>)

Preparation to Enter Programs

Students entering programs in Applied Computing & Engineering Technology are expected to have basic computing skills and adequate preparation in mathematics.

Undergraduate

- Electronics Technology A.A.S. (p. 363)
- Energy Technology A.A.S. (p. 364)
- Information Technology A.A.S., Network Administration and Security (p. 365)
- Information Technology A.A.S., Programming and App Development (p. 366)

Undergraduate Certificates

- Computer Aided Design Certificate of Applied Science (p. 361)
- Computer Support Certificate of Applied Science (p. 361)
- Electronics Technology Certificate of Applied Science (p. 362)
- Energy Technology Certificate of Applied Science (p. 363)
- Cybersecurity Certificate (p. 362)
- Health Information Technology Certificate (p. 365)
- Energy Auditor Certificate (p. 363)
- Recycling Technology Technical Certificate (p. 367)

Computer Aided Design C.A.S.

Thomas Gallagher, 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: 2017-2018

Summary

Computer Aided Design Core Certificate Courses	34
Total Hours	34

Computer Aided Design Core Certificate Courses

Rule: All courses are required

Note: WRIT 121 may be substituted for WRIT 101 at the discretion of the program advisor based on future career and educational goals.

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 Srvy for Engineers	3
WRIT 101	College Writing I	3
or WRIT 121	Intro to Technical Writing	
Total Hours		34

Minimum Required Grade: C-

Computer Support C.A.S.

Thomas Gallagher, 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

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Summary

Computer Support Core Courses	28
Mathematics	3-4
Total Hours	31-32

Computer Support Core Courses

Rule: All courses are required

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

Select one of the following 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

Minimum Required Grade: C-

Cybersecurity

Certificate of Technical Studies - Cybersecurity

Missoula College

Degree Specific Credits: 16

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Note: Prerequisite skills needed to succeed in this proposed NIS certificate program are met with a degree in Network Management or related field or equivalent work experience. It would be helpful for incoming students to have industry certifications such as A+, CCNA, Security+, Microsoft Servers, or Net+ to establish an appropriate baseline skill set.

Summary

Core Certificate Courses	16
Total Hours	16

Core Certificate Courses

Rule: All courses are required

ITS 271	Securing Desktop/Mobile Dev.	4
ITS 273	Securing Networks	4
ITS 275	Border/Perimeter Network Sec	4
ITS 277	Software Assurance and File Sy	4
Total Hours		16

Minimum Required Grade: C-

Electronics Technology C.A.S

Certificate of Applied Science - Electronics Technology

Missoula College

Degree Specific Credits: 30

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Summary

Core Courses	30
Total Hours	30

Core Courses

Rule: Must complete all of the following courses:

CSCI 105	Computer Fluency	3
CSCI 113	Programming with C++ I	3
ETEC 105	DC Circuit Analysis	4
ETEC 106	AC Circuit Analysis	3
ETEC 113	Circuits Lab	1
ETEC 250	Solid State Electronics I	4
M 121	College Algebra	3
M 122	College Trigonometry	3
PSYX 100S	Intro to Psychology	3

WRIT 101	College Writing I	3
Total Hours		30

Minimum Required Grade: C-

Electronics Technology A.A.S.

Steve Shen, Program Director

Students in the Electronics Technology program learn to troubleshoot, calibrate, test, and repair electronic components and circuit boards used in a wide range of electronic equipment including computers and communication equipment. Training includes working knowledge of direct and alternating current theory, semiconductor circuits, instrumentation, automatic controls, data communications, computerized communication links, and operational amplifiers. Students become familiar with robotics, electronic communications theory, and modes of RF communications.

Students are awarded the Associate of Applied Science degree upon successful completion of the program.

Associate of Applied Science - Electronics Technology

Missoula College

Degree Specific Credits: 62

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Summary

Electronics Technology core courses	62
Total Hours	62

Electronics Technology core courses

Rule: All courses are required

CSCI 105	Computer Fluency	3
CSCI 113	Programming with C++ I	3
or CSCI 110	Programming - VB I	
ETEC 105	DC Circuit Analysis	4
ETEC 106	AC Circuit Analysis	3
ETEC 113	Circuits Lab	1
ETEC 245	Digital Electronics	4
ETEC 250	Solid State Electronics I	4
ETEC 251	Solid State Electronics II	3
ETEC 260	Data and Network Communication	3
ETEC 265	Control Systems	4
ETEC 270	Wireless Communications	4
ETEC 275	Microprocessors and Microcontrollers	4
ETEC 299	Electronics Capstone	3
M 121	College Algebra	3
M 122	College Trigonometry	3
M 162	Applied Calculus	4

PSYX 100S	Intro to Psychology	3
SCN 175N	Integrated Physical Science I	3
WRIT 101	College Writing I	3
or WRIT 121	Intro to Technical Writing	
Total Hours		62

Minimum Required Grade: C-

Energy Auditor C.T.S.

Certificate of Technical Studies - Energy Auditor

Missoula College

Degree Specific Credits: 18

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Summary

Core Courses	18
Total Hours	18

Core Courses

Rule: Must complete all of the following courses:

BGEN 105S	Introduction to Business	3
EETC 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

Minimum Required Grade: C-

Energy Technology Certificate

The Energy Technology program offers a 30-credit certificate preparing students for entry-level positions in the energy technology field. Required coursework includes mathematics; writing; energy technologies and systems; and energy storage and distribution. Coursework for the certificate program also leads to the A.A.S. degree in Energy Technology.

Certificate of Applied Science - Energy Technology

Missoula College

Degree Specific Credits: 30

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018**Summary**

Energy Technology Core Requirements	
Energy Electives	3
Total Hours	3

Energy Technology Core Requirements

Rule: All courses are required

Note: Substitutions may be approved at the discretion of the program director based on future career and educational goals

BGEN 105S	Introduction to Business	3
or BGEN 160S	Issues in Sustainability	
CSCI 172	Intro to Computer Modeling	3
ETEC 105	DC Circuit Analysis	4
ETEC 106	AC Circuit Analysis	3
ETEC 113	Circuits Lab	1
ETEC 213	Power Systems Technology	3
or ETEC 214	Energy Storage and Dist.	
M 121	College Algebra	3
NRGY 101N	Intro to Sustainable Energy	3
NRGY 195	Practicum	2
NRGY 235	Building Energy Efficiency	4
WRIT 101	College Writing I	3
or WRIT 121	Intro to Technical Writing	
Total Hours		32

Minimum Required Grade: C-

Energy Electives

Select 3 credits from the following:	3
NRGY 241	Alternative Fuels
NRGY 242	Solar Thermal & Wind Systems
NRGY 243	Fundmtl PV Design & Install
NRGY 244	Bioenergy
NRGY 245	Fuel Cells
NRGY 246	Geothermal Energy Technology
NRGY 250	Energy Finance
NRGY 270	Recycling Technology
NRGY 290	Undergraduate Research
NRGY 291	Special Topics
NRGY 292	Independent Study
NRGY 299	Energy Technology Capstone
Total Hours	3

Minimum Required Grade: C-

Energy Technology A.A.S.

Students in the Energy Technology program are introduced to the full suite of energy sources and technologies. Graduates will be general practitioners that are equipped with skills in design, installation, and maintenance of diverse energy technologies and systems; sales, operations, and management; regulatory compliance; basic electricity and power systems; energy storage and distribution; site assessment; basic energy economics; efficiency and conservation strategies; and project management. Students may enter the program in either autumn or spring term. Further information can be found on the Sustainable Energy Technology website (http://mc.umt.edu/acet/Academic_Programs/NRGY/default.php).

Associate of Applied Science - Energy Technology**Missoula College**

Degree Specific Credits: 61

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018**Summary**

Energy Technology Core Requirements	43
Energy Technology Science Requirements	3
Energy Electives	15
Total Hours	61

Energy Technology Core Requirements

Rule: All courses are required

Note: Substitutions are approved at the discretion of the program director based on future career and educational goals

BGEN 105S	Introduction to Business	3
or BGEN 160S	Issues in Sustainability	
CSCI 172	Intro to Computer Modeling	3
ETEC 105	DC Circuit Analysis	4
ETEC 106	AC Circuit Analysis	3
ETEC 113	Circuits Lab	1
ETEC 213	Power Systems Technology	3
or ETEC 214	Energy Storage and Dist.	
ITS 221	Project Management	3
M 121	College Algebra	3
M 122	College Trigonometry	3
NRGY 101N	Intro to Sustainable Energy	3
NRGY 102	Intro to Sustainable Energy II	3
NRGY 195	Practicum	2
NRGY 235	Building Energy Efficiency	4
NRGY 298	Internship	2
WRIT 101	College Writing I	3
or WRIT 121	Intro to Technical Writing	
Total Hours		43

Minimum Required Grade: C-

Energy Technology Science Requirements

Note: Substitutions are approved at the discretion of the program director based on future career and educational goals.

Select one of the following:	3
SCN 175N Integrated Physical Science I	
SCN 176N Integrated Phys. Science II or ENSC 105 Environmental Science	
Total Hours	3

Minimum Required Grade: C-

Energy Electives

Note: 3 credits of a general elective may be substituted in place of 3 credits of energy electives. This substitution must be approved by the program director.

Select 15 credits from the following:	15
NRGY 241 Alternative Fuels	
NRGY 242 Solar Thermal & Wind Systems	
NRGY 243 Fundmtl PV Design & Install	
NRGY 244 Bioenergy	
NRGY 245 Fuel Cells	
NRGY 246 Geothermal Energy Technology	
NRGY 250 Energy Finance	
NRGY 270 Recycling Technology	
NRGY 290 Undergraduate Research	
NRGY 291 Special Topics	
NRGY 292 Independent Study	
NRGY 299 Energy Technology Capstone	
Total Hours	15

Minimum Required Grade: C-

Health Information Technology

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.

Professional Certificate - Health Information Technology

Missoula College

Degree Specific Credits: 13-18

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Summary

Select one of the following Tracks	13-18
Computing Track	13
Health Professional Track	18
Total Hours	13-18

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.

Health Information Courses

Rule: All courses are required

AHMS 144	Medical Terminology	3
AHMS 156	Medical Billing Fundamentals	3
HIT 101	Intro to Healthcare Informatic	3
HIT 265	Electronic Health Records	3
NRSNG 100	Introduction to Nursing	1
Total Hours		13

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.

Computing courses

Rule: All courses are required

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

Minimum Required Grade: C-

Network Administration and Security

Thomas Gallagher, 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, IBM Academic Alliance, & a 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+).

Students entering the program should be prepared with basic computing skills (keyboarding, word processing, file management, and Internet applications) and adequate preparation in mathematics (completion of M 090 or equivalent placement scores). Underprepared students should allocate an additional semester to the suggested four semester sequence.

Associate of Applied Science - Information Technology; Network Administration and Security Concentration

Missoula College

Degree Specific Credits: 60

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Summary

Information Technology Core Courses	28
Mathematics	3
Network Administration and Security Option Requirements	25
Security Course Requirement	4
Total Hours	60

Information Technology Core Courses

Rule: All courses are required

Note: Completion of IT core courses fulfills requirements for CAS in computer support.

BGEN 105S	Introduction to Business	3
CSCI 105	Computer Fluency	3
CSCI 110	Programming - VB 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

Rule: Any Mathematics course level 115 or higher

Network Administration and Security Concentration Requirements

Rule: All courses are required

COMX 111A	Intro 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 222	Enterprise Security	3
ITS 250	CCNA 3: Exploration	3
ITS 252	CCNA 4: Exploration	3
ITS 298	Internship/Cooperative Educati	2

Total Hours 26

Minimum Required Grade: C-

Security Course Requirement

Select one of the following: 4

ITS 271	Securing Desktop/Mobile Dev.
ITS 273	Securing Networks
ITS 275	Border/Perimeter Network Sec
ITS 277	Software Assurance and File Sy

Total Hours 4

Minimum Required Grade: C-

Programming and App Development

Thomas Gallagher, 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

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Summary

Information Technology Core Courses	28
Mathematics	3
Programming and App Development Option Requirements	23
Programming and App Development Directed Electives	6
Total Hours	60

Information Technology Core Courses

Rule: All courses are required

Note: Completion of IT core courses fulfills requirements for CAS in computer support.

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 I: 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

Rule: Any Mathematics course level 115 or higher

Programming and App Development Concentration Requirements

Rule: All courses are required

COMX 111A	Intro 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

Rule: Required; take a minimum of 6 credits

Note: Student must select at least two directed elective courses (minimum of 6 credits). 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.

Minimum Required Grade: C-

Recycling Technology C.T.S. Certificate of Technical Studies- Recycling Technology

Missoula College

Degree Specific Credits: 16

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Summary

Core Courses	16
Total Hours	16

Core Courses

Rule: Must 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

Minimum Required Grade: C-

Business Technology Department

Cheryl Galipeau, Chair

The Business Technology Department of Missoula College collaborates with business and industry to prepare graduates to compete in and contribute to a dynamic global society. The department attracts and retains skilled faculty with the professional experience and theoretical background to utilize diverse instruction which reflects current and emerging business practices. Faculty actively engage 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 a concentration in Computer Support; Administrative Management with a 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 and Entrepreneurship/Start-up.

Undergraduate

- Accounting Technology A.A.S. (p. 368)
- Accounting Technology A.A.S., Computer Support Concentration (p. 368)
- Administrative Management A.A.S. (p. 369)
- Administrative Management A.A.S., Social Media Management Concentration (p. 370)
- Food Service Management A.A.S. (p. 374)
- Hospitality Management A.A.S. (p. 375)
- Management A.A.S., Entrepreneurship Concentration (p. 376)
- Management A.A.S., Sales and Marketing Concentration (p. 377)

- Medical Information Technology A.A.S., Health Information Coding Concentration (p. 378)
- Medical Information Technology A.A.S., Medical Administrative Assisting Concentration (p. 379)
- Paralegal Studies A.A.S. (p. 380)

Undergraduate Certificates

- Business Media Design Certificate of Applied Science (p. 371)
- Culinary Arts Certificate of Applied Science (p. 373)
- Customer Relations Certificate of Applied Science (p. 372)
- Hospitality Management Certificate of Applied Science (p. 374)
- Medical Claims Specialist Certificate (p. 380)
- Medical Reception Certificate of Applied Science (p. 377)
- Sales and Marketing Certificate of Applied Science (p. 376)
- Entrepreneurship Start-up Technical Certificate (p. 375)

Accounting Technology A.A.S.

Lisa Swallow, Director

Almost all organizations need either in-house financial staff or outside bookkeeping/accounting services to aid with financial data compilation and reporting. Bookkeepers and accountants maintain financial records and often participate in strategic planning and other fiscal decisions. Graduates work in small businesses as full charge bookkeepers or large businesses as members of an accounting staff. They are required to communicate extensively with vendors, clients, and employees and are often key players in business projections, cash forecasting, and budgeting. This program provides students the marketable skills for employability in a variety of organizations including service, retail, non-profit, governmental, and accounting firms. Program graduates use technology to gather, compile and analyze data. They communicate budgetary and accounting information to non-financial colleagues and managers. Students considering this program should be analytical, detail-oriented, and enjoy using current technology.

Associate of Applied Science - Accounting Technology

Missoula College

Degree Specific Credits: 63

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Note: See Program Director for scope and sequence advising. Please refer to online schedule for online course availability.

Summary

AAS Accounting Technology	60
Total Hours	60

AAS Accounting Technology

Rule: All courses required.

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	Intro to Public Speaking	3
COMX 115S	Introduction to Interpersonal Communications	3.000
M 115	Probability and Linear Mathematics	3
WRIT 101	College Writing I	3
WRIT 121	Intro to Technical Writing	3
Total Hours		63

Minimum Required Grade: C-

Accounting Technology - Computer Support A.A.S.

Lisa Swallow, Director

In addition to accounting technician training, students selecting this option will be prepared to manage and maintain LAN and/or WAN system, install, maintain and troubleshoot software, and train and support system users. They also will be trained to configure and diagnose workstation hardware, administer system security and upgrade, update and expand network systems.

Associate of Applied Science - Accounting Technology; Computer Support Concentration

Missoula College

Degree Specific Credits: 64

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Note: See Program Director for scope and sequence advising. Please refer to online schedule for online course availability.

Summary

AAS Accounting Technology	61
Writing Requirement	3
Total Hours	64

AAS Accounting Technology

Rule: All courses required.

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	Intro 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

Minimum Required Grade: C-

Writing Requirement

Rule: Pick 1 of the 2 courses below

Note: See Program Director for prerequisites, placement and advising.

WRIT 101	College Writing I	3
or WRIT 121	Intro to Technical Writing	
Total Hours		3

Minimum Required Grade: C-

Administrative Management A.A.S.

Cheryl Galipeau, Director

The Administrative Management Program allows students to advance the career proficiencies acquired in the Customer Relations certificate program by earning an Associate of Applied Science Degree. Graduates are prepared to meet the administrative and information needs of business and industry by learning to craft online and print documents and publications, communicate positively with internal and external customers, and manage administrative resources, projects, and information. This program prepares students to become vital members of executive teams with the ability to assume supervisory, organizational,

and communication roles in the coordination of administrative services. Students will have the opportunity to gain industry standard expertise by earning Microsoft Office Specialist (MOS) certifications in Microsoft Office programs. Earning a Microsoft Office Specialist certification increases job opportunities by proving technical proficiency in advanced skills to potential and current employers. An Associate of Applied Science Degree in Administrative Management opens opportunities for graduates in a 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: 64

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Note: See Program Director for scope and sequence advising. Please refer to online schedule for online course availability.

Summary

AAS, Administrative Management, Course Requirements	54
Writing Requirements	3
Math Requirements	3
Accounting Requirements	4
Total Hours	64

AAS, Administrative Management, Course Requirements

Rule: All courses required

Note: Completion of the requirements for a Certificate of Applied Science in Customer Relations, 33 credits, is embedded within the completion of the Administrative Management courses. See Program Director for CAS advising.

See Program Director for advising regarding course prerequisites, and math and writing placement assessments.

AMGT 145	Records Management	2
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	Intro 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
ITS 221	Project Management	3
MART 214	Digital Publishing & Design	3
MART 232	Interactive Web II	3
Total Hours		54

Minimum Required Grade: C-

Writing Requirements

Rule: Pick 1 of the 2 courses below

Note: See Program Director for prerequisites, placement and advising.

WRIT 101	College Writing I	3
or WRIT 121	Intro to Technical Writing	
Total Hours		3

Minimum Required Grade: C-

Math Requirements

Rule: Pick 1 of the 2 courses below

Note: See Program Director for prerequisites, placement and advising. Minimum

M 105	Contemporary Mathematics	3
or M 115	Probability and Linear Mathematics	
Total Hours		3

Required Grade: C-

Accounting Requirements

Rule: Pick 1 of the 2 courses below

ACTG 100	Essentials of Accounting	4
or ACTG 101	Accounting Procedures I	
Total Hours		4

Minimum Required Grade: C-

Administrative Management A.A.S. - Concentration in Social Media Management

Cheryl Galipeau, Director

Through the Administrative Management, Social Media Management Concentration, students explore social media platforms and how social media is effectively used to target and attract multiple audiences, build relationships, and promote a presence using new and traditional marketing communications methods. Courses develop skills in producing creative written content for online and print publications, creating and editing images, producing and editing video, and incorporating search engine optimization strategies for user-centered and accessible design in an online environment. Students will use real-time analytics across various social media platforms to understand customer patterns and improve the customer experience and brand's profile by producing and publishing relevant, engaging, and sharable content. Graduates are prepared to evaluate suitability of media content and practices according to expected professional and ethical responsibilities in our global society. An Associate of Applied Science in Administrative Management with a concentration in Social Media Management prepares graduates for careers in product promotion, marketing and communications, and more in a variety of business settings such as product or service related businesses, non-profit, educational, and healthcare organizations.

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:

- 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 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

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.

Associate of Applied Science - Administrative Management; Social Media Management Concentration

Missoula College

Degree Specific Credits: 63

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Note: See Program Director for scope and sequence advising. Please refer to online schedule for online course availability.

Summary

Social Media Management Option Course Requirements	60
Writing Requirement	3
Total Hours	63

AAS, Administrative Management, Social Media Management Option Course Requirements

Rule: All courses required

Note: See Program Director for advising regarding BMKT 291, Special Topics: Social Media Strategies and Management, 3 cr, offered spring.

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 245	Customer Service Management	4
BMKT 114	Psychology of Selling	3
BMKT 225	Marketing	3
BMKT 240	Advertising	3
BMKT 265	Social Media Strat & Mgmt	3
CAPP 120	Introduction to Computers	3
COMX 111A	Intro to Public Speaking	3
COMX 115S	Introduction to Interpersonal Communications	3
COMX 140L	Intro to Visual Rhetoric	3
COMX 250	Intro to Public Relations	3
CSCI 172	Intro to Computer Modeling	3
JRNL 100H	Media History and Literacy	3
JRNL 257	Beginning Visual Journalism	3
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		63

Minimum Required Grade: C-

Business Media Design C.A.S.

Cheryl Galipeau, Director

This program prepares students with a foundation in digital and information technologies, the nature of business enterprise, media history, typography, art, and artistic aesthetics and expression. Courses are project-based; students use artistic business media applications to create and develop a story, select and edit photographs, and create and edit audio/visual work in both still and time-based mediums. Successful projects demonstrate artistic digital expression, effective visual communication, and attractive composition. Students will learn and use Adobe applications, such as Photoshop, After Effects, Final Cut,

Dreamweaver, Flash, InDesign, Bridge, Acrobat, and more. Successful graduates are prepared for entry level jobs in media design for business, education or non-profit organizations. In addition, graduates meet the prerequisite requirements for entry into the undergraduate programs, B.A in Media Arts or B.F.A in 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: 2017-2018

Note: See Program Director for scope and sequence advising.

Summary

CAS Business Media Design Course Requirements	30
Computer Science Requirements	3
Total Hours	33

CAS Business Media Design Course Requirements

Rule: All courses required

BGEN 105S	Introduction to Business	3
COMX 140L	Intro to Visual Rhetoric	3
M 115	Probability and Linear Mathematics	3
MART 101L	Intro to Media Arts	3
MART 102	Digital Technology in the Arts	3
MART 111A	Intro to Photoshop	3
MART 112A	Introduction to Film Editing	3

MART 214	Digital Publishing & Design	3
MART 232	Interactive Web II	3
WRIT 101	College Writing I	3
Total Hours		30

Minimum Required Grade: C-

Computer Science Requirements

Rule: Pick 1 of the 2 courses below

Note: See Program Director for prerequisites, placement and advising.

CAPP 120	Introduction to Computers	3
or CSCI 105	Computer Fluency	
Total Hours		3

Minimum Required Grade: C-

Customer Relations C.A.S

Cheryl Galipeau, Director

The Customer Relations Certificate prepares students to give customers what they expect and increase competitive advantage by creating a service culture, building and maintaining relationships, and developing customer service management systems. Core topics include verbal/nonverbal communication, navigating challenges, resolving conflict, and listening; managing interpersonal relationships and building teams; public relations, reputation management and trust in organizations to improve internal and external customer relationships. Emphasis in business, computers, communications, and exceptional service skills add to a student's 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: 33

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Note: The Certificate of Applied Science in Customer Relations is available online. See Program Director for scope and sequence advising.

Summary

CAS Customer Relations Course Requirements	24
Math Requirements	3
Writing Requirements	3
Computer Science Requirements	3
Total Hours	33

CAS Customer Relations Course Requirements

Rule: All courses required

AMGT 145	Records Management	2
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		24

Minimum Required Grade: C-

Math Requirements

Rule: Pick 1 of the 2 courses below

Note: See Program Director for prerequisites, placement and advising.

M 105	Contemporary Mathematics	3
or M 115	Probability and Linear Mathematics	
Total Hours		3

Minimum Required Grade: C-

Writing Requirements

Rule: Pick 1 of the 2 courses below

Note: See Program Director for prerequisites, placement and advising.

WRIT 101	College Writing I	3
or WRIT 121	Intro to Technical Writing	
Total Hours		3

Minimum Required Grade: C-

Computer Science Requirements

Rule: Pick 1 of the 2 courses below

Note: See Program Director for prerequisites, placement and advising.

CAPP 156	MS Excel	3
or CSCI 172	Intro to Computer Modeling	

Minimum Required Grade: C-

Culinary Arts C.A.S.

Tom Campbell, Director

The Bureau of Labor Statistics indicates that the hospitality field is America's number one retail employer and predicts its growth will increase 30 percent over the next two years. Students entering the Culinary Arts Certificate program or Food Service Management degree program prepare for careers in the hospitality industry. Students develop the skills needed to then seek employment in hotels, restaurants, resorts, casinos, clubs, catering, and corporate dining. Culinary careers encompass hospitality management, sales, product development, and entrepreneurship.

To meet the growing demand of the hospitality industry, two program options are available. Students may earn a Culinary Arts Certificate of Applied Science or a Food Service Management Associate of Applied Science degree.

The Culinary Arts certificate program is three semesters and provides an introduction to the field of culinary arts. Students prepare for an entry-level position in the expanding and challenging food service industry. This program incorporates comprehensive hands-on learning experiences complemented by supportive courses designed to prepare students for a wide range of career opportunities. This program also allows for a seamless transition into the Food Service Management degree.

Certificate of Applied Science - Culinary Arts

Missoula College

Degree Specific Credits: 44

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Note: See Program Director for scope and sequence advising. Please refer to online schedule for online course availability.

Summary

CAS Culinary Arts Certificate	44
Total Hours	44

CAS Culinary Arts Certificate

Rule: All courses required.

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
Total Hours		44

Minimum Required Grade: C-

Food Service Management A.A.S.

Tom Campbell, Director

The Food Service Management program culminates in an Associate of Applied Science Degree. This program combines theory, practical training, and industry experience to prepare students for entry-level and management positions in the diverse and dynamic hospitality industry. The degree program is designed to continue principles taught in the Culinary Arts certificate program. The spectrum of learning is expanded to include more in-depth professional studies thereby enhancing employment options. Accreditation by the American Culinary Federation ensures graduates' eligibility for certification as an ACF "Certified Culinarian".

Technical subject areas include introduction to the industry, basic baking, patisserie, cost control, dining room service, Garde manger, nutritional cooking, fundamental cooking principles, short order cookery, a la carte stations, menu planning, supervised internship, and the recognized sanitation certificate awarded by the National Restaurant Association Educational Foundation.

Associate of Applied Science - Food Service Management

Missoula College

Degree Specific Credits: 65

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Note: See Program Director for scope and sequence advising. Please refer to online schedule for online course availability.

Summary

AAS Food Service Management	65
Total Hours	65

AAS Food Service Management

Rule: All courses required.

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 Management	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
Total Hours		65

Minimum Required Grade: C-

Hospitality Management Certificate

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: 32

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Summary

Core Courses	28-33
Total Hours	28-33

Core Courses

Rule: Must 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

Minimum Required Grade: C-

Hospitality Management A.A.S.

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: 2017-2018

Note: See Program Director for scope and sequence advising. Please refer to online schedule for online course availability.

Summary

AAS Hospitality Management	60
Hospitality Management Elective	3
Total Hours	63

AAS Hospitality Management

Rule: All courses required.

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	Intro 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

Minimum Required Grade: C-

Hospitality Management Elective

Minimum Required Grade: C-

3 Total Credits Required

Entrepreneurship/Start-up Certificate

Technical Certificate - Entrepreneurship/Start-up

Missoula College

Degree Specific Credits: 13

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Summary

Core Courses 13

Core Courses

Rule: Must complete all of the following courses:

ACTG 101	Accounting Procedures I	4
BMGT 299	Capstone:Entrepreneurship	3
BMKT 114	Psychology of Selling	3
BMKT 240	Advertising	3
Total Hours		13

Minimum Required Grade: C-

Sales and Marketing Certificate

This concentration combines technical sales and promotional related courses as a foundation for students seeking middle to advanced positions in the sales and marketing field. Students will be required to complete sales presentations using appropriate techniques to apply consultative and negotiation selling skills. Students will study and demonstrate effective sales techniques, plan and implement effective visual displays and presentations, and develop strong record keeping skills and management of accounts. Additional emphases in computer skills, accounting, and technical writing provide students with the needed edge for this competitive career.

Certificate of Applied Science - Sales and Marketing

Missoula College

Degree Specific Credits: 34

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Summary

CAS Sales and Marketing	34
Total Hours	34

CAS Sales and Marketing

Rule: All courses required

Note: See Program Director for scope and sequence advising. Please refer to online schedule for online course availability.

ACTG 101	Accounting Procedures I	4
ACTG 102	Accounting Procedures II	4
BMKT 109	Visual Merchandising & Display	3
BMKT 112	Applied Sales	2
BMKT 114	Psychology of Selling	3
BMKT 225	Marketing	3
CAPP 120	Introduction to Computers	3
COMX 250	Intro to Public Relations	3
CSCI 172	Intro to Computer Modeling	3
M 115	Probability and Linear Mathematics	3
WRIT 101	College Writing I	3
Total Hours		34

Minimum Required Grade: C-

Management - Entrepreneurship A.A.S.

Students selecting the Entrepreneurship option will focus on venture initiation, constructing business plans, generating financing, and beginning operations. Areas of study focus on the critical factors involved in accounting, sales strategy, advertising and marketing issues complemented with supervisory skills. Students gain knowledge of basic disciplines of business through both classroom and hands-on training. Computer technology and web development are added components to assist students to compete in today's changing business climate. Successful graduates will depart with a comprehensive business plan and presentation skills required to approach financiers.

Associate of Applied Science - Management; Entrepreneurship Option

Missoula College

Degree Specific Credits: 64

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Note: See Program Director for scope and sequence advising. Please refer to online schedule for online course availability.

Summary

AAS Business Management, Entrepreneurship	64
Total Hours	64

AAS Business Management, Entrepreneurship

Rule: All courses required

ACTG 101	Accounting Procedures I	4
ACTG 102	Accounting Procedures II	4
ACTG 180	Payroll Accounting	3
BGEN 235	Business Law	3

BFIN 205S	Personal Finance	3
BMGT 216	Psych of Mgmt & Supervision	4
BMGT 298	Management Internship	2
BMGT 299	Capstone:Entrepreneurship	3
BMKT 112	Applied Sales	2
BMKT 114	Psychology of Selling	3
BMKT 225	Marketing	3
BMKT 240	Advertising	3
CAPP 120	Introduction to Computers	3
COMX 111A	Intro to Public Speaking	3
CSCI 172	Intro to Computer Modeling	3
ECNS 201S	Principles of Microeconomics	3
M 115	Probability and Linear Mathematics	3
MART 214	Digital Publishing & Design	3
MART 232	Interactive Web II	3
PSYX 100S	Intro to Psychology	3
WRIT 101	College Writing I	3
Total Hours		64

Minimum Required Grade: C-

Management - Sales and Marketing A.A.S.

This option combines technical sales and promotional related courses as a foundation for students seeking middle to advanced positions in the sales and marketing field. Students will be required to complete sales presentations using appropriate techniques to apply consultative and negotiation selling skills. Students will study and demonstrate effective sales techniques, plan and implement effective visual displays and presentations, and develop strong record keeping skills and management of accounts. Additional emphases in computer skills, accounting, and technical writing provide students with the needed edge for this competitive career.

Associate of Applied Science - Management; Sales and Marketing Concentration

Missoula College

Degree Specific Credits: 67

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Note: See Program Director for scope and sequence advising. Please refer to online schedule for online course availability.

Summary

AAS Business Management, Sales & Marketing	67
Total Hours	67

AAS Business Management, Sales & Marketing

Rule: All courses required

Note: BMGT 298 is a 2 crt course.

ACTG 101	Accounting Procedures I	4
ACTG 102	Accounting Procedures II	4
ACTG 180	Payroll Accounting	3
BGEN 235	Business Law	3
BMGT 212	Critical Analysis for Business	3
BMGT 216	Psych of Mgmt & Supervision	4
BMGT 298	Management Internship	2
BMKT 109	Visual Merchandising & Display	3
BMKT 112	Applied Sales	2
BMKT 114	Psychology of Selling	3
BMKT 225	Marketing	3
BMKT 240	Advertising	3
CAPP 120	Introduction to Computers	3
COMX 111A	Intro to Public Speaking	3
COMX 250	Intro to Public Relations	3
CSCI 172	Intro to Computer Modeling	3
ECNS 201S	Principles of Microeconomics	3
M 115	Probability and Linear Mathematics	3
MART 214	Digital Publishing & Design	3
MART 232	Interactive Web II	3
PSYX 100S	Intro to Psychology	3
WRIT 101	College Writing I	3
Total Hours		67

Minimum Required Grade: C-

Medical Reception Certificate

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: 33

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Note: See Program Director for scope and sequence advising. Please refer to online schedule for online course availability.

Summary

CAS Medical Reception	30
Math Requirements	3
Total Hours	33

CAS Medical Reception

Rule: All courses required.

Note: Substitutions are approved at the discretion of the program director.

ACTG 100	Essentials of Accounting	4
or ACTG 101	Accounting Procedures I	
AHMS 144	Medical Terminology	3
AHMS 156	Medical Billing Fundamentals	3
AHMS 175	Medical Law & Ethics	2
AHMS 220	Medical Office Procedures	4
AHMS 252	Computerized Medical Billing	3
AMGT 145	Records Management	2
CAPP 120	Introduction to Computers	3
CAPP 154	MS Word	3
WRIT 121	Intro to Technical Writing	3
or WRIT 101	College Writing I	
Total Hours		30

Minimum Required Grade: C-

Math Requirements

Rule: Any Math course M 105 or above.

Note: Appropriate placement into mathematics courses required. Prerequisites may apply.

Minimum Required Grade: C-

3 Total Credits Required

Medical Information Technology - Health Information Coding Specialty A.A.S.

Michelle Boller, Director

Health information coders play a critical role in accurately identifying procedures and diagnoses to ensure accurate billing and reimbursement. Students are trained to:

- Understand anatomy, medical terminology, and disease processes necessary to determine correct codes and sequences
- Analyze health records and to accurately abstract and code procedures and diagnoses utilizing legal and regulatory standards
- Communicate with physicians, healthcare facilities, insurance companies, and patients to ensure accurate and timely reimbursement

Graduates are adequately prepared for many roles, such as working in a front office with patients or behind the scenes with insurance companies and healthcare facilities. Upon graduation students are encouraged and eligible to sit for AHIMA Certified Coding Associate (CCA) and Certified Coding Specialist (CCS) certification exams to increase their employment opportunities.

Associate of Applied Science - Medical Information Technology; Health Information Coding Spec Concentration

Missoula College

Degree Specific Credits: 62

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Note: See Program Director for scope and sequence advising. Please refer to online schedule for online course availability.

Summary

Degree Core Courses	59
Math Requirements	3
Total Hours	62

Degree Core Courses

Rule: All Courses Required

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

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

See program director for coding course information.

WRIT 101 may be substituted for WRIT 121 at the discretion of the program director.

AHMS 108	Health Data Content & Struct	2
AHMS 144	Medical Terminology	3
AHMS 156	Medical Billing Fundamentals	3
AHMS 175	Medical Law & Ethics	2
AHMS 216	Pharmaceutical Products	3
AHMS 220	Medical Office Procedures	4
AHMS 245	Simulated Lab	3
AHMS 298	Medical Info Internship	3
AHMS 252	Computerized Medical Billing	3
BIOH 112	Human Form and Function I	3
CAPP 120	Introduction to Computers	3
CAPP 154	MS Word	3
CAPP 156	MS Excel	3
COMX 115S	Introduction to Interpersonal Communications	3
PSYX 100S	Intro to Psychology	3
WRIT 121 or WRIT 101	Intro to Technical Writing College Writing I	3
Total Hours		47

Minimum Required Grade: C-

Math Requirements

Rule: Any Math course M 105 or above

Minimum Required Grade: C-

3 Total Credits Required

Medical Information Technology - Medical Administrative Assisting A.A.S.

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 Assist Concentration

Missoula College

Degree Specific Credits: 64

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Note: See Program Director for scope and sequence advising. Please refer to online schedule for online course availability.

Summary

Degree Core Courses	61
Math Requirements	3
Total Hours	64

Degree Core Courses

Rule: All Courses Required

Note: Substitutions are approved at the discretion of the program director.

ACTG 100 or ACTG 101	Essentials of Accounting Accounting Procedures I	4
AHMS 108	Health Data Content & Struct	2
AHMS 144	Medical Terminology	3
AHMS 156	Medical Billing Fundamentals	3
AHMS 175	Medical Law & Ethics	2
AHMS 220	Medical Office Procedures	4
AHMS 252	Computerized Medical Billing	3
AHMS 298	Medical Info Internship	3
AMGT 145	Records Management	2
AMGT 240	Admin Support for the Office	3
BIOH 112	Human Form and Function I	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 156	MS Excel	3
CAPP 254	Advanced MS Word	3
COMX 115S	Introduction to Interpersonal Communications	3

WRIT 121	Intro to Technical Writing	3
or WRIT 101	College Writing I	
Total Hours		58

Minimum Required Grade: C-

Math Requirements

Rule: Any Math Course M 105 or above

Minimum Required Grade: C-

3 Total Credits Required

Medical Claims Specialist Certificate

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.

Medical Claims Specialist Certificate

Missoula College

Degree Specific Credits: 22

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Note: See Program Director for scope and sequence advising. Please refer to online schedule for online course availability.

Summary

Medical Claims Specialist Certificate

Rule: All courses required.

Note: Substitutions are approved at the discretion of the program director.

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

Minimum Required Grade: C-

Paralegal Studies A.A.S.

Tom Stanton, Director

This program is approved by the American Bar Association. The Paralegal Studies program prepares students for challenging and diverse careers in private law practices and in the law-related areas of business, industry, and government. The goals of the Paralegal Studies program are to enable students, through theoretical and practical legal education, to understand the function of law, to work as paralegals in the effective delivery of legal services, and to enhance the legal profession. This program is designed to equip students with skills to analyze legal issues and to perform a variety of activities including drafting legal documents, interviewing clients, conducting legal research, and preparing cases for trial. Students utilize current technology through Internet research and legal and general office software applications. Paralegal studies students receive the necessary legal training to take advantage of new career opportunities in all sectors of the economy. Students are exposed to the principles of legal ethics and are cautioned regarding restrictions against the unauthorized practice of law by laypersons. Paralegals may not provide legal services directly to the public, except as permitted by law.

Associate of Applied Science - Paralegal Studies

Missoula College

Degree Specific Credits: 68

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Note: Two year/four semester in-step degree. If classes are taken out of sequence, or Spring enrollment, additional semesters are required for graduation. Also note, LEG prefix (legal specialty) are only offered in the semester indicated.

See Program Director for scope and sequence advising. Please refer to online schedule for online course availability.

Summary

Associate in Applied Sciences in Paralegal Studies Course Requirements	68
Total Hours	68

Associate in Applied Sciences in Paralegal Studies Course Requirements

Rule: All Courses Required

ACTG 100	Essentials of Accounting	4
or ACTG 101	Accounting Procedures I	
BMGT 212	Critical Analysis for Business	3
CAPP 120	Introduction to Computers	3
CAPP 154	MS Word	3
COMX 111A	Intro to Public Speaking	3
LEG 183	Contracts	2
LEG 184	Legal Ethics	2
LEG 185	Introduction Paralegal Studies	3
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

Minimum Required Grade: C-

Health Professions Department

Dan Funsch, Chair

The Health Professions Department of Missoula College-University of Montana seeks to prepare students to be health practitioners who are technically competent and who are safe and in a variety of clinical, agency and community settings. The Health Professions Department offers four Associate of Applied Science (A.A.S.) Degrees, one Associate of Science (A.S.) Degree, and one Certificate of Applied Science (CAS) program with courses and learning experiences that contribute to understanding the health needs of individuals and society. Clinical affiliations and on-site experiences are essential elements of all programs; local and regional communities, their agencies, and organizations are a valuable resource and provide cooperative learning experiences in health delivery systems.

Undergraduate

- Medical Assisting A.A.S. (p. 381). (<http://catalog.umt.edu/colleges-schools-programs/missoula-college/health-professions/aas-practical-nursing>)
- Radiologic Technology A.A.S. (p. 383)
- Registered Nursing A.S. (p. 384)

- Respiratory Care A.A.S. (p. 386)
- Surgical Technology A.A.S. (p. 387)

Undergraduate Certificates

- Pharmacy Technology C.A.S. (p. 382)
- Computer Tomography Certificate (p. 381)

Computed Tomography Certificate

The five-credit Computed Tomography certificate fulfills the new American Registry of Radiologic Technologists certification requirements and is available to registered and licensed radiologic technologists and current Missoula College radiology students.

The Montana Department of Labor and Industry has agreed to work with employers to set up an apprenticeship model for qualified candidates to complete their clinical competences. Employers may sponsor the certification of current radiologic technologists to ensure compliance with the new ARRT Certification requirements. For technologists who are not employed by the institution, the apprenticeship agreement would codify a probationary period, incremental wage increases, a requirement to pass the certification exam, and a requirement to work for an agreed-upon amount of time once the training is complete.

For more information, please call:

Maryann Dunbar - Administrative Assistant, Health Professions
- 406-243-7868

Anne Delaney - Program Director, Radiologic Technology - 406-243-7809

Technical Certificate - Computed Tomography

Missoula College

Degree Specific Credits: 6

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Summary

Certificate in Computed Tomography	5
Total Hours	5

Certificate in Computed Tomography

Rule: All courses required

AHXR 274	Cross Sectional Anatomy	3
AHXR 275	Physics and Instrumentation	2
Total Hours		5

Minimum Required Grade: B

Medical Assisting A.A.S.

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 AHMA 260 & AHMA 262 Laboratory courses. A course may be attempted a maximum of two times. At the end of the program the student will perform a 200-hour, unpaid 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 who desire to obtain certification as a Medical Assistant will need to meet with the program director to discuss available options.

Associate of Applied Science - Medical Assisting

Missoula College

Degree Specific Credits: 47

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Note: A minimum of a C in each Medical Assisting core course is required for graduation. Medical Assisting core courses must be completed with no more than 2 attempts. The student must show competence in computers to enter the Medical Assisting program.

Summary

Core Courses	60
Total Hours	60

Core Courses

Rule: Must 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 260	Med Assist Lab 1	2
AHMA 262	Med Assist Laboratory Procedures 2	2
AHMA 298	Medical Assisting Externship	5
AHMS 144	Medical Terminology	3
AHMS 156	Medical Billing Fundamentals	3
AHMS 175	Medical Law & Ethics	2
AHMS 216	Pharmaceutical Products	3
AHMS 220	Medical Office Procedures	4
AHMS 252	Computerized Medical Billing	3
BIOH 112	Human Form and Function I	3
BIOH 113	Human Form and Function II	3
CAPP 154	MS Word	3
COMX 115S	Introduction to Interpersonal Communications	3
M 105	Contemporary Mathematics	3
PSYX 100S	Intro to Psychology	3
WRIT 121	Intro to Technical Writing	3
Total Hours		60

Minimum Required Grade: C

Pharmacy Technology C.A.S.

Mary McHugh, Director

The Pharmacy Technology Program at Missoula College prepares students to function as pharmacy technicians in hospital-based pharmacies, community pharmacies, and several other types of pharmacies. The two-semester program includes online classes, simulation exercises in a well-equipped pharmacy lab, and experiential learning opportunities. Lab and experiential hours allow students to integrate their knowledge gained from online studies into practical settings.

The Pharmacy Technology Program is an autumn entry program. Applicants to the Pharmacy Technology program must complete the program specific application packet which can be obtained from the UM Missoula College Pharmacy Technology website.. Documentation of college level skills in writing, math, and computers is required. Please see the application form for acceptable methods of documentation.

Once accepted into the program, all students are expected to register with the State of Montana as Pharmacy Technicians in Training. Please note the requirements of registration as a Pharmacy Technician in Training found on the application form on the Montana State Board of Pharmacy website: <http://boards.bsd.dli.mt.gov/pha> Students must complete the required autumn PHAR classes with a C or higher to proceed to the spring semester. If a student does not pass the required courses with a C or better, he/she will not be able to continue in the program and will need to apply for readmission. A student may take any required course a maximum of two (2) times. After successfully completing the program and sitting for the Pharmacy Technician Certification Exam, students are awarded a Certificate of Applied Science.

Conviction of a crime (misdemeanor or felony) could leave an individual ineligible for participation in the certifying test and/or becoming registered in Montana as a certified pharmacy technician. Background checks are required prior to internships. Additionally, the Montana State Board of Pharmacy Application for Pharmacy Technician Registration

includes a number of questions regarding personal history, including but not limited to criminal charges. Please contact the PTCB (Pharmacy Technician Certification Board), www.ptcb.org (<http://www.ptcb.org>), and the Montana State Board of Pharmacy if this is a potential problem.

The Pharmacy Technology Program is accredited by the American Society of Health System Pharmacists/Accreditation Council of Pharmacy Education (ASHP/ACPE), as well as falling under the University of Montana's accreditation by the Northwest Commission on Colleges and Universities (NWCCU).

The Bureau of Labor Statistics indicates that for 2016, the salary range in Montana was \$33,970-\$42,170.

Certificate of Applied Science - Pharmacy Technology

Missoula College

Degree Specific Credits: 33

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Note: Math: Placement into Level 3 using a proctored ALEKS assessment

Writing: Score of 7 on the E-Write assessment

Summary

Degree Core Courses	33
Total Hours	33

Degree Core Courses

Rule: Complete all courses

Note: AHMS 144 May be taken before application to the program.

There are two different sections of PHAR 198 and both are required to receive the certificate.

AHMS 144	Medical Terminology	3
CAPP 120	Introduction to Computers	3
PHAR 100	Intro Pharm Practice for Techs	3
PHAR 101	Pharmacy Calculations	3
PHAR 102	Pharmacology for Technicians	6
PHAR 104	Pharmacy Dispensing Lab	3
PHAR 120	Medication Safety	3
PHAR 121	Preparation for the PTCB Exam	1
PHAR 198	Internship: Pharmacy (two different sections - 4 credits each)	8
Total Hours		33

Minimum Required Grade: C-

Radiologic Technology A.A.S.

Anne Delaney, 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 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 degree in Radiologic Technology requires students to successfully complete the Pre-Radiology prerequisite courses prior to applying to the program. Students admitted to the University of Montana may enroll in the Pre-Radiology prerequisite courses.

Students must pass BIOH 201N-202N with a minimum grade of 'B' and have a minimum cumulative GPA of 2.75 in all course work, including prerequisite courses, to apply to the Radiologic Technology program. 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 second semester. A ten-week summer clinical rotation is required between the first and second years and consists of 40 hour per week of clinical instruction. The Autumn semester of the second year will also be dedicated to 40 hours per week 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 Summer semester of the program. These sites may include, but are not limited to, Ronan, Hamilton, Plains, Ronan, and Polson, Montana. Transportation and housing are the student's responsibility.

Associate of Applied Science - Radiologic Technology

Missoula College

Degree Specific Credits: 83

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Note: It is preferred that students have the prerequisite core completed by the end of the semester in which they intend to apply to the program (i.e. applying to the program in the spring and completing the core by the end of that spring semester.) Students must also prove competence with computer technology prior to application to the Radiology Technology Program in one of the following three ways:

1. Acceptable transfer credit for CAPP 120,
2. Passing challenge exam for CAPP 120, or
3. Take and pass CAPP 120

Summary

Radiologic Technology Prerequisite Courses	13
Math Requirement	3
Writing Requirement	3
Radiologic Technology Courses	68
Total Hours	87

Radiologic Technology Prerequisite Courses

Rule: All courses required

Note: Students must pass BIOH 201N/BIOH 202N with a minimum grade of 'B' and have a minimum cumulative GPA of 2.75 in all course work including prerequisite courses to apply to the Radiologic Technology program.

AHMS 144	Medical Terminology	3
BIOH 201N	Human Anat Phys I (equiv 301) (minimum grade of 'B')	4
CAPP 120	Introduction to Computers	3
SCN 175N	Integrated Physical Science I	3
Total Hours		13

Minimum Required Grade: C-

Math Requirement

Rule: Take either

M 115	Probability and Linear Mathematics	3
or M 121	College Algebra	
Total Hours		3

Minimum Required Grade: C-

Writing Requirement

Rule: Take either

WRIT 101	College Writing I	3
or WRIT 121	Intro to Technical Writing	
Total Hours		3

Minimum Required Grade: C-

Radiologic Technology Courses

Rule: All courses required

Note: These courses cannot be taken unless accepted into the program through the application process.

- AHXR 195 is taken Spring Semester at 2 credits and Summer at 12 credits.
- AHXR 295 is taken Autumn Semester at 12 credits and second year Spring at 8 credits.
- For AHXR courses the minimum grade is a B.

AHMS 270E	Medical Ethics	3
AHXR 100	Intro to Diagnostic Imaging	3
AHXR 121	Radiographic Imaging I	4
AHXR 140	Radiographic Methods	3
AHXR 141	Radiology Lab	1
AHXR 221	Radiographic Imaging II	3
AHXR 195	Radiographic Clinical: I	14
AHXR 225	Radiobiology/Radiation Protctn	2
AHXR 240	Radiological Methods II	2
AHXR 241	Radiology Lab II	1
AHXR 270	Radiographic Registry Review	2
AHXR 295	Radiographic Clinical: I	20
BIOH 211N	Human Anat Phys II (equiv 311)	4
COMX 115S	Introduction to Interpersonal Communications	3
PSYX 100S	Intro to Psychology	3
Total Hours		68

Minimum Required Grade: C-

Registered Nursing

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 (<http://mc.umt.edu/health>). 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 (dlibsdnur@mt.gov).

Associate of Science - Registered Nursing

Missoula College

Degree Specific Credits: 72

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Note: Students must pass all NRSNG 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

Registered Nursing	65-68
Writing Requirement	3
Mathematics Requirement	3-4
Total Hours	71-75

Registered Nursing

Rule: All courses required

Note: Students must pass all nursing (rubric NRSNG) courses with a minimum grade of a B.

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	3
CHMY 122	Introduction to General Chemistry Lab	1
NRSNG 230	Nursing Pharmacology	3
NRSNG 231	Nursing Pharmacology Lab	2
NRSNG 232	Foundations of Nursing	3
NRSNG 233	Foundations of Nursing Lab	3
NRSNG 234	Adult Nursing I	3
NRSNG 235	Adult Nursing I Clinical	2
NRSNG 236	Health and Illness of Maternal Nursing	2
NRSNG 237	Health and Illness of Maternal Nursing Clinical	1
NRSNG 244	Adult Nursing II	3
NRSNG 245	Adult Nursing II Clinical	2
NRSNG 246	Health and Illness of Child and Family Nursing	2
NRSNG 247	Health and Illness of Child and Family Nursing Clinical	1
NRSNG 254	Mental Health Concepts	2-3
NRSNG 255	Mental Health Concepts Clinical	1
NRSNG 256	Pathophysiology	3
NRSNG 259	Adult Nursing III	3
NRSNG 260	Adult Nursing III Lab	1
NRSNG 261	Adult Nursing III Clinical	2
NRSNG 266	Managing Client Care for the Registered Nurse	2-4
NRSNG 267	Managing Client Care for the Registered Nurse Clinical	2
PSYX 100S	Intro to Psychology	3
SOCI 101S	Introduction to Sociology	3
Total Hours		65-68

Minimum Required Grade: C-

Writing Requirement

Rule: All courses required

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

WRIT 101	College Writing I	3
Total Hours		3

Minimum Required Grade: C-

Mathematics Requirement

Rule: Must complete one of the following courses

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.

Select one of the following:	3-4
M 115	Probability and Linear Mathematics
M 121	College Algebra (recommended)
M 151	Precalculus
M 171	Calculus I
Total Hours	3-4

Minimum Required Grade: C-

Respiratory Care A.A.S.

Nicholas Arthur, Program Director

Respiratory Care is an allied health specialty. It is an important part of modern medicine and health care. Respiratory Care encompasses the care of patients with respiratory problems in the hospital, clinic, and home.

Respiratory therapists, as members of a team of health care professionals, work to evaluate, treat, and manage patients of all ages with respiratory illnesses and other cardiopulmonary disorders in a wide variety of clinical settings. Respiratory therapists must behave in a manner consistent with the standards and ethics of all health care professionals. In addition to performing respiratory care procedures, respiratory therapists are involved in clinical decision-making (such as patient evaluation, treatment selection, and assessment of treatment efficacy) and patient education. The scope of practice for respiratory therapist includes, but is not limited to:

- acquiring and evaluating clinical data;
- assessing the cardiopulmonary status of patients;
- performing and assisting in the performance of prescribed diagnostic studies, such as drawing blood samples, performing blood gas analysis, pulmonary function testing, and applying adequate recording electrodes using polysomnographic techniques;
- utilizing data to assess the appropriateness of prescribed respiratory care;
- establishing therapeutic goals for patients with cardiopulmonary disease;
- participating in the development and modification of respiratory care plans;
- case management of patients with cardiopulmonary and related diseases;
- initiating ordered respiratory care, evaluating and monitoring patients' responses to such care, modifying the prescribed respiratory therapy

and cardiopulmonary procedures, and life support endeavors to achieve desired therapeutic objectives;

- initiating and conducting prescribed pulmonary rehabilitation;
- providing patient, family, and community education;
- promoting cardiopulmonary wellness, disease prevention, and disease management;
- participating in life support activities as required; and
- promoting evidence-based medicine, research, and clinical practice guidelines.

Starting salaries are excellent with premiums paid for evening, night, and weekend shifts. Jobs are plentiful throughout the United States. Graduates are eligible to take the credentialing examinations administered by the National Board for Respiratory Care (NBRC) which lead to the Registered Respiratory Therapist (RRT) credential. Licensure requirements in the state of Montana also are met by successful completion of the NBRC Entry Level (CRT) examination.

The goal of the program is, "To prepare graduates with demonstrated competence in the cognitive (knowledge), psychomotor (skills), and affective (behavior) domains of respiratory care practice as performed by registered respiratory therapists (RRTs)" CoARC standard 3.01.

The program is 4 ½ semesters in length which includes the AA prerequisite courses and a summer session. The Respiratory Care Program at The University of Montana Missoula College, is accredited by the Commission on Accreditation for Respiratory Care (www.coarc.com) (<http://www.coarc.com>), 1248 Harwood Road, Bedford, Texas 76021-4244. Graduates receive the degree of Associate of Applied Science in Respiratory Care.

Students accepted to the program are required to rotate to clinical sites outside the Missoula area on a periodic basis. These rotations take place during the spring semester, summer session and autumn semester of the second year. These sites may include, but are not limited to: Kalispell, Ronan, Polson, Butte, Billings, Bozeman, Hamilton, Helena, Coeur d'Alene and Lewiston, Idaho and Spokane, Washington. Transportation and housing are the student's responsibility.

Associate of Applied Science - Respiratory Care

Missoula College

Degree Specific Credits: 83

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

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

Pre- Respiratory Care Prerequisite Courses	31
Respiratory Care Courses	52
Total Hours	83

Pre- Respiratory Care Prerequisite Courses

Rule: All courses required

Note: Must have completed or be in the process of completing when applying to the program. A minimum GPA of 2.75 for prerequisite courses is required in order to apply to the program.

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

Rule: All courses required

AHRC 101	Communication Management	1
AHRC 115	Blood Gas Analysis	2
AHRC 129	Patient Care & Assessment	4
AHRC 130	Respiratory Care Lab IB	1
AHRC 131	Resp Care Fundamentals	5
AHRC 133	Resp Care Pharmacology	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	5
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		52

Minimum Required Grade: B-

Surgical Technology A.A.S.

Students in the program are educated to be Surgical Technologists who work as part of the surgical team to ensure the operative procedure is conducted under optimal conditions. The ST is responsible for three phases (preoperative, intraoperative, and postoperative) of patient

care with minimal direction. All surgical team members must adhere to the principles of asepsis and the practice of sterile technique. The ST normally functions in a sterile capacity by passing instruments, equipment and supplies to the surgeon during the surgical procedure but may also perform many non-sterile duties throughout the workday.

Students admitted to the University of Montana enter as Associate of Arts (AA) General Studies majors with an emphasis in the program of their choice. Students must select the specific prerequisite courses required for their chosen area of study after meeting with the program advisor. Students must apply to the program by October 1. Students may apply while enrolled in the A.A. prerequisite courses with acceptance to the program to be determined after the Autumn semester grades are finalized. BIOH 201N/202N, Anatomy and Physiology I, and lab, must be passed with a grade of B (3.0) and be a face-to-face course. The program-specific courses begin spring semester.

Once accepted to the program, a student must complete each Surgical Technology-specific course (those courses with an AHST) with a minimum grade of 'C' (80%) in order to continue in the ST program. Course grading scales may vary. If a student does not pass the required courses, he/she will not be able to continue in the program and will need to apply for readmission. If a student is re-admitted, he/she will be required to complete skills labs, AHST 115 and AHST 215, to ensure sterile technique skills are acceptable for patient care. A student may take any required course a maximum of two (2) times. A student may apply to the program a maximum of two (2) times.

A student will become a member of the Association of Surgical Technologists (www.ast.org) during the first year in the program. A student anticipating program completion will write the National Certification Exam prior to graduation. A student who successfully completes the ST program is awarded an A.A.S. degree in Surgical Technology. The credential of Certified Surgical Technologist (CST) will be awarded to a student upon passing the National Certification Exam and graduation from the ST program. The credential of Certified is awarded by the National Board of Surgical Technology and Surgical Assisting (NBSTSA).

Students are required to rotate sites during the clinical portion of their education. During the last semester of the program, internships may be outside the Missoula area. Transportation and housing are the student's responsibility. Prior to entering a healthcare facility for clinical experiences, a student will be required to submit a background check. Many healthcare facilities have increasingly stringent requirements. A student could be refused entry into a clinical facility based on information disclosed in a background check. If this is a concern for you, please consult the Program Director. If a student is denied agency access based on the background check, there will be no placement at an alternate site, and the subsequent inability of the student to complete the clinical education will result in inability to continue in the Surgical Technology program.

The University of Montana Missoula College Surgical Technology Program also has Outreach campuses in Butte and Billings. The Butte site is the Montana Tech of the University of Montana Highlands College campus in collaboration with St James Healthcare. The Billings site is the Montana State University-Billings City College campus in collaboration with St Vincent Healthcare and Billings Clinic. Students at those sites take the equivalent prerequisite courses on their respective campuses. The Surgical Technology-specific courses begin spring semester. Students must apply to the ST program by October 1. Students may apply while enrolled in the prerequisite courses with acceptance to the

program to be determined after fall grades are finalized. The classroom portion of the ST program curriculum is delivered in web-based format using the Moodle course delivery system from the Missoula campus. Lab and clinical courses are conducted on each Outreach campus. Outreach students are required to travel to Missoula to write the National Certification Exam and to participate in Commencement exercises. Prospective students may contact the Health Professions' Office at 406-243-7868 for more information regarding the ST Program on the Butte and Billings campuses. Please refer to the specific course catalogs on the Butte and Billings campuses for prerequisite requirements.

The ST program is accredited by the Committee on Accreditation of Allied Health Education Programs (CAAHEP), 25400 U. S. Highway 19 North; Suite 158; Clearwater, FL 33763, 727-21002350, www.caahep.org (<http://www.caahep.org>).

Associate of Applied Science - Surgical Technology

Missoula College

Degree Specific Credits: 70

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Note: It is preferred that students have the prerequisite core completed by the end of the semester in which they intend to apply to the program (i.e. applying to the program in the fall semester and completing the core by the end of that fall semester.) CAPP 120 may be challenged by testing out. WRIT 101 or WRIT 121 only one is required. BIOM 250N and AHMS 270E may be taken prior to applying.

Summary

Surgical Technology Prerequisite Courses	23
Surgical Technology Courses	47
Total Hours	70

Surgical Technology Prerequisite Courses

Rule: All courses required

Note: WRIT 101 can be taken instead of WRIT 121; BIOH 201N/BIOH 202N must be passed with a minimum of a B

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 or WRIT 101	Intro to Technical Writing College Writing I	3
Total Hours		19

Minimum Required Grade: C-

Surgical Technology Courses

Rule: All courses required

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 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		43

Minimum Required Grade: C

Industrial Technology Department

William Hillman, 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. (p. 389)
- Sustainable Construction Technology A.A.S. (p. 392)
- Welding Technology A.A.S. (p. 394)

Undergraduate Certificates

- Facility Management Engineering Certificate of Applied Science (p. 389)
- Heavy Equipment Operation Certificate of Applied Science (p. 390)
- Precision Machine Technology Certificate of Applied Science (p. 391)
- Recreational Power Equipment Certificate of Applied Science (p. 392)

- Green Building Certificate (p. 393)
- Carpentry Certificate of Applied Science (p. 393)
- Construction Management Certificate of Applied Science (<http://catalog.umt.edu/colleges-schools-programs/missoula-college/industrial-technology/cert-construction-management>)
- Welding Technology Certificate of Applied Science (p. 393)
- Construction Helper Certificate (p. 389)
- HVAC Technician Certificate (p. 390)
- Precision Machine Technology Certificate (p. 391)

Construction Helper C.T.S.

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: 2017-2018

Summary

Required Courses	16
Total Hours	16

Required Courses

Rule: All courses required

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

Minimum Required Grade: C-

Diesel Technology A.A.S.

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: 64

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Summary

Required Courses	64
Total Hours	64

Required Courses

Rule: All courses required

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
WLDG 139	Welding Maint & Repair -Diesel	1
WRIT 121	Intro to Technical Writing	3
Total Hours		64

Minimum Required Grade: C-

Facility Management Engineering C.A.S.

The mission of the Facility Management Engineering 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 Engineering 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 (william.hillman@mso.umt.edu) for more information.

Certificate of Applied Science - Facility Management

Missoula College

Degree Specific Credits: 33

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Summary

Required Courses	33
Total Hours	33

Required Courses

Rule: All courses required

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

Minimum Required Grade: C-

Heavy Equipment Operation C.A.S.

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: 31

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Summary

Required Courses	31
Total Hours	31

Required Courses

Rule: All courses required.

CAPP 120	Introduction to Computers	3
COMX 102	Interprsnl Skills in Workplace	1
HEO 146	Safety & Basic Controls	5
HEO 150	Job Simulation	6
HEO 151	Service & Maintenance	2
HEO 153	Const. Theory & Spec. Equip.	5
M 111	Technical Mathematics	3
MCH 112	Related Metals Processes I	1
SRVY 108	Construction Surveying	2
WRIT 121	Intro to Technical Writing	3
Total Hours		31

Minimum Required Grade: C-

HVAC Technician Certificate

Students in this 12-credits, 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 and receive the NCCER certification for Heating, Ventilation, Air conditioning and Refrigeration (HVAC). 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 - HVAC Technician

Missoula College

Degree Specific Credits: 12

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Summary

Required Courses	12
Total Hours	12

Required Courses

Rule: All courses required

FME 122	Electricity	6
FME 130	Heating & Air Conditioning	6
Total Hours		12

Minimum Required Grade: C-

Precision Machine Technology C.A.S.

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: 34

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Summary

Required Courses	34
Total Hours	34

Required Courses

Rule: All courses required

DDSN 135	Solidworks	2
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		34

Minimum Required Grade: C-

Precision Machine Technology C.T.S.

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: 21

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Summary

Course List	Course List	Hours
Certificate of Technical Studies in Precision Machine Technology		15
Total Hours		15

Required Courses

Rule: All courses required

Course List	Course List	Hours
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
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Total Hours		15

Minimum Required Grade: C-

Recreational Power Equipment C.A.S.

The mission of the Recreational Power Equipment Program is to provide the regional workforce with credentialed, skilled, and competent power equipment technicians and to be responsive to emerging workforce needs.

The Recreational Power Equipment Program prepares students to repair and maintain a wide variety of two-cycle and four-cycle engines and related equipment. Students work on motorcycles, ATVs, snowmobiles, outboard motors, and personal watercraft. Units of instruction include mechanical, fuel, and electrical systems. The program also encourages the development of teamwork and interpersonal skills required on the job.

For more detailed information including program costs, tool requirements, student class schedules, and course syllabi, visit: <http://mc.umt.edu/industrial-tech/>

Contact Mike Steffenson, Program Director, at 406-243-7693 or Michael.Steffenson@umontana.edu for more information.

Certificate of Applied Science - Recreational Power Equipment

Missoula College

Degree Specific Credits: 27

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Summary

Required Courses	27
Total Hours	27

Required Courses

Rule: All courses required

CAPP 120	Introduction to Computers	3
COMX 102	Interprsnl Skills in Workplace	1
M 111	Technical Mathematics	3
MCH 115	Related Metals Processes III	3
WRIT 121	Intro to Technical Writing	3
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Total Hours		13

Minimum Required Grade: C-

Sustainable Construction Technology A.A.S.

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, concrete forming and placement, residential framing, roofing, siding, and window installation.

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: 72

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Summary

Required Courses	72
Total Hours	72

Required Courses

Rule: All courses required

BMGT 242	Front Line Supervision	3
CAPP 120	Introduction to Computers	3
CSTN 120	Carpentry Bscs & Rough-In Frmng	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
CSTN 205	Advanced Carpentry Lecture	6
CSTN 206	Advanced Carpentry Lab	2
CSTN 261	Building Management	4
CSTN 278	Applied Building Practices Lab	6
CSTN 279	Commercial Construction	4
CSTN 282	Green Bldg Concept & Design I	4
CSTN 283	Green Bldg Concept & Design II	3
CSTN 299	Capstone: Carpentry	2
DDSN 114	Introduction to CAD	3
WLDG 103	Welding Fund Constructn Trades	2
M 111	Technical Mathematics	3
NRGY 120	Industrial Safety and Rigging	3

WRIT 101	College Writing I	3
Total Hours		72

Minimum Required Grade: C-

Carpentry C.A.S.

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: 2017-2018

Summary

Required Courses	36
Total Hours	36

Required Courses

Rule: All courses required

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

Minimum Required Grade: C-

Green Building C.T.S.

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: 29

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Summary

Required Courses	29
Total Hours	29

Required Courses

Rule: All courses required

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

Minimum Required Grade: C-

Welding Technology C.A.S.

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: 2017-2018 Summary

Required Courses	37
Total Hours	37

Required Courses

Rule: All courses required.

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 Symls	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

Minimum Required Grade: C-

Welding Technology A.A.S.

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: 65

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

First Year Welding Program	35
Second Year Welding Program	30
Total Hours	65

First Year Welding Program

Rule: All Courses Required for the AAS in Welding

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 Symls	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

Minimum Required Grade: C-

Second Year Welding Program

Rule: All Courses Required for the AAS in Welding

BMGT 242	Front Line Supervision	3
DDSN 114	Introduction to CAD	3
MCH 214	Advanced Related Metals Proc	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		30

Minimum Required Grade: C-

College of Visual and Performing Arts

Stephen Kalm, Dean

The College of Visual and Performing Arts (CVPA) is comprised of four professionally accredited schools:

- Art,
- Media Arts,
- Music and
- Theatre & Dance.

CVPA is committed to leadership in pedagogy, creative scholarship and professional performances and exhibitions. The College prides itself on its high achieving faculty, successful alumni and talented students. CVPA:

- serves UM students by teaching performing and visual arts with rigor and devotion, and by offering preparation and experience that enable students to succeed in the world of art, to perform and create with grace and maturity, and to teach with expertise and perspective
- serves the University, the community, state, region and nation, by presenting concerts, productions, and exhibitions of high quality, and by offering educational and research opportunities in the arts for all disciplines
- serves as the cultural center of the state and region
- provides national leadership in the arts by enhancing the excellence of traditional arts curricula, instruction and research with innovative and imaginative programs that utilize new technologies, incorporate various media, and enhance cultural and intellectual environments
- inspires the pursuit of excellence by encouraging creativity and expression through the arts

In addition, the College of Visual and Performing Arts offers *Creative Pulse: Master's Degree in Integrated Arts and Education* program for educators and education administrators during summer sessions. Creative Pulse students embrace and explore critical thinking processes and habits of the mind, enabling participants to develop, refine and

integrate these processes into their own thinking and learning abilities, as well as those of their students.

For more information visit the College of Visual and Performing Arts website (<http://www.umt.edu/umarts>).

Art

Julia Galloway, Director

The School of Art provides a comprehensive education in studio art, including intensive hands-on studio practice, art history, criticism, and theory. Programs provide thorough professional training for students interested in careers in the field of art.

Degree offerings include the B.A., B.F.A., M.A., and M.F.A. in Art. Areas of specialization are Ceramics, Drawing, Painting, Photography, Printmaking and Sculpture. An M.A. degree in Art with concentrations in Studio Art and/or Art History is also offered, as well as courses that prepare students for licensure for teaching art.

Advanced Placement Policy

All students, including those who have taken AP examinations, must submit a portfolio to challenge art classes. Undergraduate students may challenge foundations courses only ARTZ 105A; 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. (p. 397)
- Art B.F.A (p. 399)

Undergraduate Minors

- Art History and Criticism (p. 395)
- Art Studio (p. 396)

Art History and Criticism Minor Minor - Art History/Criticism (Minor)

College of Visual & Perf Arts

Degree Specific Credits: 24

Required Cumulative GPA: 2.5

Catalog Year: 2017-2018

Note: Minor in Art History For Those Not Majoring In Art

Summary

Studio Art Fundamentals	12
Visual Language	
Beginning Art History	
Beginning Art Criticism	
Upper Division Art History And Criticism	12
Total Hours	24

Studio Art Fundamentals

Rule: Must complete the following subcategories

12 Total Credits Required

Visual Language

Rule: The following course is required

ARTZ 105A	Visual Language - Drawing	3
Total Hours		3

Minimum Required Grade: C

Beginning Art History

Rule: All courses are required

ARTH 200H	Art of World Civilization I	3
ARTH 201H	Art of World Civilization II	3
Total Hours		6

Minimum Required Grade: C

Beginning Art Criticism

Rule: The following course is required

ARTH 250L	Introduction to Art Criticism	3
Total Hours		3

Minimum Required Grade: C

Upper Division Art History And Criticism

Rule: 12 Credits Of 300-400 Level Art History And/Or Criticism Courses Required

Select 12 credits from the following: 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

Minimum Required Grade: C

Art Studio Minor Minor - Art Studio (Minor)

College of Visual & Perf Arts

Degree Specific Credits: 27

Required Cumulative GPA: 3.0

Catalog Year: 2017-2018

Summary

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

Studio Art Fundamentals

Rule: Must complete the following subcategories

24 Total Credits Required

Visual Language

Rule: All courses are required

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

Minimum Required Grade: C

Beginning Art History

Rule: All courses are required

ARTH 200H	Art of World Civilization I	3
ARTH 201H	Art of World Civilization II	3
Total Hours		6

Minimum Required Grade: C+

Studio I Courses

Rule: 3 courses are required

Select three of the following: 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

Minimum Required Grade: C

Upper Division Studio Course

Rule: 1 300-400 Level Studio Course Required

Select 3 credits from the following: 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

Minimum Required Grade: C

Arts B.A.

Bachelor of Arts - Art

College of Visual & Perf Arts

Degree Specific Credits: 57

Required Cumulative GPA: 3.0

Catalog Year: 2017-2018

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

Lower Division Requirements	36
Studio Art Fundamentals	
Studio I Courses	

Beginning Art History And Criticism	
Upper Division Studio Courses	12
Upper Division Art History	6
Upper Division Art Criticism	3
18 Additional Upper Division (300-400 Level) Credits	18
Art Education Licensure Requirements	
Total Hours	75

Lower Division Requirements

Rule: All Courses Are Required Unless Waived Via Departmental Advanced Placement Policy

Studio Art Fundamentals	9
Beginning Art History	6
Introductory Art Criticism	3
Photography	3
Ceramics	3
Printmaking	3
Sculpture	3
Painting	3
Drawing	3
Total Hours	36

Minimum Required Grade: C

Studio Art Fundamentals

Rule: All Courses Required Unless Waived Via Deaprtmental Advanced Placement Policy

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

Minimum Required Grade: C

Studio I Courses

Rule: All Courses Required

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
Total Hours		18

Minimum Required Grade: C

Beginning Art History And Criticism

Rule: All Courses Required

ARTH 200H	Art of World Civilization I	3
ARTH 201H	Art of World Civilization II	3
ARTH 250L	Introduction to Art Criticism	3
Total Hours		9

Minimum Required Grade: C

Upper Division Studio Courses

Select 12 credits from the following: 12

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 384	Photo II-Theory, Crit, Prctice
ARTZ 385	The Art of Digital Photography
ARTZ 391	Special Topics
ARTZ 398	Internship
ARTZ 410	Advanced Research- Drawing
ARTZ 420	Advanced Research- Painting
ARTZ 430	Advanced Research- Ceramics
ARTZ 451	Advanced Research- Sculpture
ARTZ 470	Advanced Research- Printmaking
ARTZ 486	Advanced Research- Photography
ARTZ 491	Special Topics
ARTZ 492	Independent Study
ARTZ 494	Seminar- Professional Practices

Total Hours 12

Minimum Required Grade: C

Upper Division Art History

Select 6 credits from the following: 6

ARTH 333H	Architectural History I
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 6

Minimum Required Grade: C

Upper Division Art Criticism

Rule: The following course is required

ARTH 350	Contemp Art and Art Criticism	3
Total Hours		3

Minimum Required Grade: C

18 Additional Upper Division (300-400 Level) Credits

Rule: May Be In Any Subject- Student's Choice Of Courses

Note: Any 300-400 level courses may be used to satisfy this requirement.

Minimum Required Grade: C

18 Total Credits Required

Art Education Licensure Requirements

Rule: The Art Education Licensure is earned through taking classes in both the School of Art and the Phyllis J. Washington College of Education and Human Sciences. Students complete their BA or BFA in Art in conjunction with courses required from the College of Education. A student must be accepted into the College of Education.

Note: Montana Teaching Certification in Art K-12 requires a BA or BFA in Art with a specialization in Art Education, which extends beyond the 120-credit limit, or an MA in Curriculum and Instruction with the required undergraduate credits for teacher certification in art. Students earning a BA or a BFA in Art must also take ARTZ 402, ARTZ 403 as well as THTR 239A or DANC 497. In addition student are required to take 35 credits of EDU classes, and a Native American Studies Course. Please see the College of Education and Human Sciences (p. 83) degree builder for more details.

ARTZ 402	Teaching Art I- K-12	3
ARTZ 403	Teaching Art II- K-12	3
Total Hours		6

Minimum Required Grade: C

Teaching Education Track

Individuals interested in teaching in K-12 schools must complete a degree in the content area they want to teach plus the teacher preparation program through the Department of Teaching and Learning. Individuals must complete the teaching major/teaching track within that degree program, which may contain different course requirements than the academic major since the sequence of courses is designed to meet state standards. Upon completion of the degree program with the teaching track and the secondary licensure program, one will be eligible for a standard Montana teaching license in this content area.

- Secondary Education Licensure Program (<http://www.coehs.umt.edu/departments/currinst/undergradprograms/seced/default.php>)
- Licensure Degree Requirements (p. 101)

To sign up for this option, you 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. Approvals for this option 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.

Art Education Courses

Rule: All courses are required

Note: ARTZ 402 must be taken prior to ARTZ 403. Students can choose to take either DANC 497 or THTR 239A

ARTZ 402	Teaching Art I– K-12	3
ARTZ 403	Teaching Art II– K-12	3
DANC 497	Methods: Tchng Movmnt in Schls	2-3
or THTR 239A	Creative Drama/Dance: K-8	
Total Hours		8-9

Minimum Required Grade: C

Teaching Licensure Requirements

Note: Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Teaching and Learning (p. 95) in the College of Education and Human Sciences for more information. A major or minor GPA of 2.75 is required to be eligible for student teaching.

Fine Arts B.F.A.

Bachelor of Fine Arts - Art

College of Visual & Perf Arts

Degree Specific Credits: 75

Required Cumulative GPA: 3.0

Catalog Year: 2017-2018

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

Lower Division Requirements	36
Studio Art Fundamentals	
Studio I Courses	
Begining Art History And Criticism	
Upper Division Studio Courses I	12
Upper Division Studio Courses	12
Upper Division Art History	6
Upper Division Art Criticism	3
18 Additional Upper Division (300-400 Level) Credits	18
Art Education Licensure Requirements	
Senior Thesis Capstone	6
Total Hours	93

Lower Division Requirements

Rule: All Courses Are Required Unless Waived Via Departmental Advanced Placement Policy

Note: Students seeking the Bachelor of Fine Arts degree with a major in Art must complete 36 credits of lower division art courses:

Studio Art Fundamentals	9
Beginning Art History	6
Introductory Art Criticism	3
Photography	3
Ceramics	3
Printmaking	3
Sculpture	3
Painting	3
Drawing	3
Total Hours	36

Minimum Required Grade: C

36 Total Credits Required

Studio Art Fundamentals

Rule: All Courses Required Unless Waived Via Deptmtental Advanced Placement Policy

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

Minimum Required Grade: C

Studio I Courses

Rule: All Courses Required

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
Total Hours		18

Minimum Required Grade: C

Beginning Art History And Criticism

Rule: All Courses Required

ARTH 200H	Art of World Civilization I	3
ARTH 201H	Art of World Civilization II	3
ARTH 250L	Introduction to Art Criticism	3
Total Hours		9

Minimum Required Grade: C

Upper Division Studio Courses I

Select 12 credits from the following: 12

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 384	Photo II-Theory, Crit, Prctice
ARTZ 385	The Art of Digital Photography
ARTZ 391	Special Topics
ARTZ 398	Internship
ARTZ 410	Advanced Research- Drawing
ARTZ 420	Advanced Research- Painting
ARTZ 430	Advanced Research- Ceramics
ARTZ 451	Advanced Research- Sculpture
ARTZ 470	Advanced Research- Printmaking
ARTZ 486	Advanced Research- Photography
ARTZ 491	Special Topics
ARTZ 492	Independent Study
ARTZ 498	Internship

Total Hours 12

Minimum Required Grade: C

Upper Division Studio Courses

Select 12 credits from the following: 12

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 384	Photo II-Theory, Crit, Prctice
ARTZ 385	The Art of Digital Photography
ARTZ 388	Alternative Process Photog
ARTZ 391	Special Topics
ARTZ 398	Internship
ARTZ 410	Advanced Research- Drawing
ARTZ 420	Advanced Research- Painting
ARTZ 430	Advanced Research- Ceramics
ARTZ 451	Advanced Research- Sculpture
ARTZ 470	Advanced Research- Printmaking
ARTZ 284A	Photo I-Techs and Processes
ARTZ 486	Advanced Research- Photography
ARTZ 491	Special Topics
ARTZ 492	Independent Study
ARTZ 498	Internship

Total Hours 12

Minimum Required Grade: C

Upper Division Art History

Select 6 credits from the following: 6

ARTH 333H	Architectural History I
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 6

Minimum Required Grade: C

Upper Division Art Criticism

Rule: The following course is required

ARTH 350	Contemp Art and Art Criticism	3
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Total Hours 3

Minimum Required Grade: C

Art Education Licensure Requirements

Rule: The Art Education Licensure is earned through taking classes in both the School of Art and the Phyllis J. Washington College of Education and Human Sciences. Students complete their BA or BFA in Art in conjunction with courses required from the College of Education. A student must be accepted into the College of Education.

Note: Montana Teaching Certification in Art K-12 requires a BA or BFA in Art with a specialization in Art Education, which extends beyond the 120-credit limit, or an MA in Curriculum and Instruction with the required undergraduate credits for teacher certification in art. Students earning a BA or a BFA in Art must also take ARTZ 402, ARTZ 403 as well as THTR 239A or DANC 497. In addition student are required to take 35 credits of EDU classes, and a Native American Studies Course. Please see the College of Education and Human Sciences (p. 83) degree builder for more details.

ARTZ 402	Teaching Art I– K-12	3
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ARTZ 403	Teaching Art II– K-12	3
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Total Hours 6

Minimum Required Grade: C

Senior Thesis Capstone

Rule: All courses are required

ARTZ 494	Seminar- Professional Practices	3
ARTZ 499	Senior Thesis/Capstone	3
Total Hours		6

Minimum Required Grade: C

Teaching Art Track

Individuals interested in teaching in K-12 schools must complete a degree in the content area they want to teach plus the teacher preparation program through the Department of Teaching and Learning. Individuals must complete the teaching major/teaching track within that degree program, which may contain different course requirements than the academic major since the sequence of courses is designed to meet state standards. Upon completion of the degree program with the teaching track and the secondary licensure program, one will be eligible for a standard Montana teaching license in this content area.

- Secondary Education Licensure Program (<http://www.coehs.umt.edu/departments/currinst/undergradprograms/seced/default.php>)
- Licensure Degree Requirements (p. 101)

To sign up for this option, you 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. Approvals for this option 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.

Art Education Courses

Rule: All courses are required.

Note: ARTZ 402 must be taken prior to ARTZ 403. Students can choose to take either DANC 497 or THTR 239A.

ARTZ 402	Teaching Art I-- K-12	3
ARTZ 403	Teaching Art II-- K-12	3
DANC 497	Methods: Tchng Movmnt in Schls	2-3
or THTR 239A	Creative Drama/Dance: K-8	
Total Hours		8-9

Minimum Required Grade: C

Teaching Licensure Requirements

Note: Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Teaching and Learning (p. 95) in the College of Education and Human Sciences for more information. A major or minor GPA of 2.75 is required to be eligible for student teaching.

Media Arts

Mark Shogren, Director

The School of Media Arts has degree programs at both undergraduate and graduate levels. The undergraduate program offers a B.A. degree that consists of a uniquely integrated curriculum centered in digital technology as a storytelling and artistic medium. The course of instruction is comprehensive and combines the areas of digital filmmaking and integrated digital media. The undergraduate program also offers a B.F.A. degree with specializations in

- Digital Filmmaking,
- Integrated Digital Media

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 (<http://www.umt.edu/mediaarts>).

Undergraduate

- Media Arts B.A. (p. 401)
- Media Arts B.F.A (p. 402)

Undergraduate Minors

- Media Arts (p. 403)

Media Arts B.A.

The School of 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 (<http://www.umt.edu/mediaarts>).

Bachelor of Arts - Media Arts

College of Visual & Perf Arts

Degree Specific Credits: 45

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

Lower Division Core	21
Upper Division Core	24
Total Hours	45

Lower Division Core

Rule: Complete all courses.

MART 101L	Intro to Media Arts	3
MART 102	Digital Technology in the Arts	3
MART 111A	Intro to Photoshop	3
MART 112A	Introduction to Film Editing	3
MART 120	Creative Coding I	3
MART 255	Photoshop: Art and Design	3
MART 256	Illustrator: Vector and Layout Design	3
Total Hours		21

Minimum Required Grade: C

Upper Division Core

Rule: Complete all 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 440	Tech Interactive Media Design	3
MART 441	Web Technologies	3
MART 450	Topics in Film/Media Studies	3
Total Hours		24

Minimum Required Grade: C

Media Arts B.F.A

Bachelor of Fine Arts - Media Arts

College of Visual & Perf Arts

Degree Specific Credits: 72

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Note: Prerequisite courses, MART 101L, MART 112A, MART 102, MART 111A, 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 (<http://catalog.umn.edu/academics/general-education-requirements>) of the catalog.

Summary

Lower Division Core	21
Upper Division Core	12
Advising Track Options	39
Digital Arts & Technology	
Digital Filmmaking	
Total Hours	72

Lower Division Core

Rule: Complete all courses.

MAR 210	Creation of Media Story	3
MAR 251	Dig Video Prod Tech	3
MART 101L	Intro to Media Arts	3
MART 102	Digital Technology in the Arts	3
MART 111A	Intro to Photoshop	3
MART 112A	Introduction to Film Editing	3
MART 120	Creative Coding I	3
Total Hours		21

Minimum Required Grade: C

Upper Division Core

Rule: Complete all courses.

MART 325	Introducton to Animation	3
MART 330	Principles of Sound Design	3
MART 340	Princ of Interactive Media	3
MART 450	Topics in Film/Media Studies	3
Total Hours		12

Minimum Required Grade: C

Tracks

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

The Bachelor of Fine Arts | Digital Arts & Technologies 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.

Rule: Complete all courses.

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 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
MART 499	Senior Project/Prof Portfolio (Professional Portfolio is required)	3
Electives		3
Total Hours		39

Minimum Required Grade: C

Digital Filmmaking

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 and commercial content creation for both traditional and web-based environments.

Rule: Complete all courses.

MAR 442	Experimental Film	3
MART 300	Visions of Film	3
MART 327	Intro to Cinematography	3
MART 336	Directing the Fic Film	3
MART 345	Sound for Film	3
MART 436	Producing	3
MART 455	Visions of Documentary Film	3
MART 491	Special Topics (Serial Writing)	3
MART 499	Senior Project/Prof Portfolio (Both Senior Project and a Professional Portfolio are required)	6
Electives		9
Total Hours		39

Media Arts Minor

The Media Arts minor program offers an integrated curriculum, centered in digital technology as a storytelling medium. The minor is meant to supplement the work of those undergraduate students whose major area of study can be enhanced through the application of Media Arts principles and technologies and fulfills the prerequisites for those interested in pursuing the B.A. The Media Arts minor is offered both in-class and online. For more information please visit the Media Arts website (<http://www.umt.edu/mediaarts>).

Minor - Media Arts (Minor)

College of Visual & Perf Arts

Degree Specific Credits: 21

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Summary

Required Courses	12
Elective Courses	9
Total Hours	21

Required Courses

Rule: Must complete all.

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

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.

Select 9 credits from the following:	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
<hr/>	
Total Hours	9

Minimum Required Grade: C

Music

Maxine Ramey, Director

The School of Music offers students who have demonstrated talent in music the opportunity to continue further study either for a profession or an avocation and at the same time acquire a broad general education. Complete sequences of courses are given to prepare a student for a career as a teacher or supervisor of music in the elementary/secondary schools; for a career directed toward composition, the music technology industry, private teaching, or concert work; or, for a thorough training in music within the structure of a broad liberal arts curriculum.

Four year degree programs at the undergraduate level include the

- Bachelor of Music Education;
- Bachelor of Music with areas of specialization in
 - performance,
 - piano performance and pedagogy
 - or composition/music technology; and
- Bachelor of Arts in music.

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

- music education,
- performance,
- composition/technology; and
- musical theater.

The University of Montana-Missoula is an accredited institutional member of the National Association of Schools of Music.

In general, admission as a major in the School of Music is by certificate from the high school from which the student graduates. The faculty of the School of Music is more concerned with evidence of talent, conspicuous achievement in music, promise of development, and scholarship in general than it is in the precise content of the program which the prospective music student has followed prior to admission to the University.

The School of Music welcomes the opportunity for prospective students and parents to consult with faculty and administration by paper and electronic correspondence and/or by appointment interviews on the campus. Every student wishing to become a music major or minor must take the Music Theory Assessment Examination and a Piano Proficiency Evaluation during orientation and also must audition and be accepted officially into the applied studio of a music faculty member prior to confirmation as a fully-admitted major or minor in music. Students may be admitted provisionally for one semester, and at the end of that semester students must reaudition to gain full admittance into a music major degree program.

Undergraduate

- Music B.A. (p. 410)
- Music B.Mus. (p. 412)
- Music Education B.M.E. (p. 417)

Undergraduate Minors

- Music (p. 422)

Composition

Bachelor of Arts - Music; Track: Specialization in Composition

- *Print This Page*

College of Visual & Perf Arts

Degree Specific Credits: 58

Required Cumulative GPA: 2.75

Catalog Year: 2017-2018

Note: 51¹ Credits of non-Music major courses (36 credits must be in the College of Arts and Sciences)

¹ 51 Credits in Music

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

1st year	19
2nd year	36
3rd year	23
4th year	5
Ensemble Requirements 1st and 2nd year	4-14
Ensembles 3rd and 4th year	4-21
Music Requirements	8
Music Writing Expectation	12
Music Requirements for Writing	3
Music Requirements for Mathematics	3
Music Requirements for Modern & Classical Languages	10
Music Requirements for Expressive Arts	3
Music Requirements for Literary & Artistic Studies	3
Music Requirements for Historic & Cultural Studies	3
Music Requirements for Indigenous & Global Perspectives	3
Music Requirements for Natural Sciences	6
<hr/>	
Total Hours	145-172

1st year

Rule: All courses required

Note: All required for first year of study for a BA in Composition:

- MUSI 195 1 credit each semester for a total of 2 credits first year.
- MUSI 180 1 credit each semester for a total of 2 credits first year.

MUSI 105	Music Theory I	2
MUSI 106	Music Theory II	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 180	Composition I (one credit each semester)	2
MUSI 195	Applied Study I (one credit each semester)	2
MUSI 202L	Intro to Music Literature	3
MUST 110	Digital Audio & Multitracking	2
Total Hours		19

Minimum Required Grade: C-

2nd year

Rule: See commentary

Note: All required for second year of study for a BA in Composition:

- MUSI 280 1 credit each semester for a total of 2 credits first year.
- MUSE 123, MUSE 120-MUSE 121, MUSE 126-MUSE 127, MUSE 272 1 credit each semester for a total of two credits second year.
- MUSI 296-01 Upper-Division Required Performance required by the end of the 2nd year of study. UDRP to consist of scholarly writing example to be approved by faculty.

MUSE 120	Techs: String Inst in Class I (one credit each semester)	2
MUSE 121	Techs: String Inst in Class II (one credit each semester)	2
MUSE 123	Techniques: Voice (one credit each semester)	2
MUSE 126	Techs: Percussn Instruments I (one credit each semester)	2
MUSE 127	Techs: Percussn Instruments II (one credit each semester)	2
MUSE 272	Technique: Flute & Single Reed (one credit each semester)	2
MUSE 273	Techniques: Double Reed (one credit each semester)	2
MUSE 274	Techniques: Upper Brass (one credit each semester)	2
MUSE 275	Techniques: Lower Brass (one credit each semester)	2
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 280	Composition II	2
MUSI 301H	Music History I	3
MUSI 302H	Music History II	3

MUST 210	Sequencng, Synthesis, Sampling	2
Total Hours		36

Minimum Required Grade: C-

3rd year

Rule: See commentary

Note: All required for third year of study for a BA in Composition:

- MUSE 123, MUSE 120-MUSE 121, MUSE 126-MUSE 127, MUSE 272 for 1 credit each semester for a total of two credits the third year.
- MUSI 380 1 credit Fall semester.

MUSE 120	Techs: String Inst in Class I (one credit each semester)	2
MUSE 121	Techs: String Inst in Class II (one credit each semester)	2
MUSE 123	Techniques: Voice (one credit each semester)	2
MUSE 126	Techs: Percussn Instruments I (one credit each semester)	2
MUSE 127	Techs: Percussn Instruments II (one credit each semester)	2
MUSE 272	Technique: Flute & Single Reed (one credit each semester)	2
MUSE 273	Techniques: Double Reed (one credit each semester)	2
MUSE 274	Techniques: Upper Brass (one credit each semester)	2
MUSE 275	Techniques: Lower Brass (one credit each semester)	2
MUSI 356	Form & Analysis I	2
MUSI 357	Form & Analysis II	2
MUSI 380	Composition III (one credit Fall Semester)	1
Total Hours		23

Minimum Required Grade: C-

4th year

Rule: All courses required

Note: 4th year required: All students majoring in music are required to attend in a minimum of 100 approved recitals/concerts prior to graduation. During the 4th year in an undergraduate degree program and upon completion of this requirement, students should register for MUSI 388, 0 cr.

MUSI 388	Concert Attendance UM	0
MUSI 440	Orchestration	2
MUSI 480	Composition IV	3
Total Hours		5

Minimum Required Grade: C-

Ensemble Requirements 1st and 2nd year

Rule: One course for each semester

All majors seeking an undergraduate degree in music and who are registered for 5 or more credits must participate in an ensemble specified by their degree curriculum each semester of residence of the regular school year. (See specific curricula for maximum ensemble credits applicable toward minimum degree requirements.)

Majors whose principal performance area is wind/percussion must register for:

Select one of the following sections:	2
Section 1, Symphonic Wind Ensemble:	
Select one of the following:	
MUSI 114A Band: UM Concert Band & MUSI 314 and Band III: UM Concert Band	
MUSI 110A Opera Theatre I	1
Section 2, University Concert Band:	
Select one of the following:	
MUSI 114A Band: UM Concert Band & MUSI 314 and Band III: UM Concert Band	
Section 1, University Orchestra, if designated by the Director, every semester:	
Select one of the following:	
MUSI 108A Orchestra: UMSO & MUSI 308 and Orchestras II: UM	
Total Hours	3

String majors must register for:

Section 1, University Orchestra, every semester:	
Select one of the following:	2
MUSI 108A Orchestra: UMSO & MUSI 308 and Orchestras II: UM	
Total Hours	2

B.A., voice, majors must register for:

- a minimum of 4 credits in MUSI 112A section 1 (University Choir).

Ensemble requirements for piano and organ are listed separately for each curriculum.

MUSI 108A Orchestra: UMSO	1
MUSI 110A Opera Theatre I	1
MUSI 112A Choir	1
MUSI 114A Band: UM Concert Band	1
MUSI 162A Chamber Ensembles I (guitar principals only)	1
MUSI 191 Special / Experimental Courses (piano principals only)	1-9
Total Hours	6-14

Ensembles 3rd and 4th year

Rule: One course each semester

Majors whose principal performance area is wind/percussion must register for:

Select one of the following sections:	1
Section 1, Symphonic Wind Ensemble:	
MUSI 314 Band III: UM Concert Band	
Section 2, University Concert Band:	
MUSI 314 Band III: UM Concert Band	
Section 1, University Orchestra, if designated by the Director, every semester:	
MUSI 308 Orchestras II: UM	
Total Hours	1

String majors must register for:

- MUSI 308 (MUSI 308), section 1, University Orchestra, every semester.

Upon completion of the upper-division recital performance, B.A., voice, majors may enroll in:

Select one of the following sections:	1-8
Section 1 (University Choir):	
MUSI 312 Choir III	
Section 2 (Chamber Chorale):	
MUSI 312 Choir III	
Section 3 (Women's Chorus):	
MUSI 312 Choir III	
Opera Theater:	
MUSI 310 Opera Theatre II	
Total Hours	1-8

Ensemble requirements for piano and organ are listed separately for each curriculum

MUSI 308 Orchestras II: UM	1
MUSI 310 Opera Theatre II	1
MUSI 312 Choir III	1-8
MUSI 314 Band III: UM Concert Band	1
MUSI 362 Chmbr Ens III: UM (guitar principals only)	1
MUSI 391 Special / Experimental Courses (piano principals only)	1-9
Total Hours	6-21

Minimum Required Grade: C-

Music Requirements

Rule: All courses required

GH 151L Introduction to Western Humanities Antiquity	3
GH 152L Introduction to the Humanities Medieval to Modern	3
Total Hours	6

Minimum Required Grade: C-

Music Writing Expectation

Rule: All courses required

MUSI 302H	Music History II (Lower- Division Writing Expectation)	3
MUSI 415	Music 20th Century to Present (Upper- Division Writing Expectation)	3
MUSI 416	Topics in Music History (Upper- Division Writing Expectation)	3
MUSI 417	Cultural Studies in Music (Upper- Division Writing Expectation)	3
Total Hours		12

Minimum Required Grade: C-

Music Requirements for Writing

Rule: All courses required

WRIT 101	College Writing I	3
Total Hours		3

Minimum Required Grade: C-

Music Requirements for Mathematics

Rule: All courses required

Note: Mathematics - M Course 100 or above

Minimum Required Grade: C-

3 Total Credits Required

Music Requirements for Modern & Classical Languages

Rule: All courses required

Note: MCLL (Modern and Classical Languages and Literature) Foreign Languages 10 credits required

Exemption from Modern and Classical Language Requirement - Symbolic Systems MUSI 105, MUSI 106, MUSI 140, MUSI 141

Minimum Required Grade: C-

10 Total Credits Required

Music Requirements for Expressive Arts

Rule: All courses required

Note: Expressive Arts - A Courses - (min. 3 credits) Ensembles and Sec. Lessons taken each semester satisfies this requirement.

Minimum Required Grade: C-

3 Total Credits Required

Music Requirements for Literary & Artistic Studies

Rule: All courses required

Note: Literary and Artistic Studies - L Courses -(min. 3 credits) MUSI 202L taken in 1st year satisfies this requirement.

Minimum Required Grade: C-

3 Total Credits Required

Music Requirements for Historic & Cultural Studies

Rule: All courses required

3 Total Credits Required

Music Requirements for Indigenous & Global Perspectives

Rule: All courses required

Note: Indigenous and Global Perspectives - (min. 3 credits) Recommend MUSI 207H

Minimum Required Grade: C-

3 Total Credits Required

Music Requirements for Natural Sciences

Rule: All courses required

Note: Natural Science (for this perspective, 6 credits required and at least one course Must include a lab experience)

Minimum Required Grade: C-

6 Total Credits Required

This is an advising track only and not an official program as recognized by the University of Montana (UM) or the Montana University System. This information will not appear on your UM transcript, diploma, university lists, student data system, or university publication. You do not fill out a major change for a track.

Instrumental Jazz Studies

Bachelor of Arts - Music; Track: Specialization Instrumental Jazz Studies

• [Print This Page](#)

College of Visual & Perf Arts

Degree Specific Credits: 50

Required Cumulative GPA: 2.75

Catalog Year: 2017-2018

Note: 51¹ Credits of non-Music major courses (36 credits Must be in the College of Arts and Sciences)

¹ 51 Credits in Music

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umd.edu/academics/general-education-requirements>) of the catalog.

Summary

1st year	15
2nd year	16
3rd year	8
4th year	6-14
BA Requirement Liberal Studies	8
Lower Division Writing Expectation	3
1st and 2nd year Ensemble Requirements	2-12
3rd and 4th year Ensemble Requirements	3
Music General Requirement for Writing	3
Upper Division Writing Expectation	6
Music Requirements for Mathematics	3
Music Requirements for Modern & Classical Languages	10
Music Requirements for Expressive Arts	3
Music Requirements for Literary & Artistic Studies	3
Music Requirements for Historic & Cultural Studies	6
Music Requirements for Social Sciences	3
Music Requirements for Ethical and Human Values	3
Music Requirements for Indigenous & Global Perspectives	3
Music Requirements for Natural Sciences	6
Total Hours	110-128

1st year

Rule: All courses required

Note: 1st year requirements MUSI 195 1 credit each semester for a total of 2 credits first year.

MUSI 105	Music Theory I	2
MUSI 106	Music Theory II	2
MUSI 130L	History of Jazz	3
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 195	Applied Study I (one credit each semester)	2
Total Hours		15

Minimum Required Grade: C-

2nd year

Rule: All courses required

Note: 2nd year requirements: MUSI 295 1 credit each semester for a total of 2 credits second year. MUSI 296 Upper-Division Required Performance must be completed before moving on to upper division classes.

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 295	Applied Study II (one credit each semester)	2
MUSI 301H	Music History I	3
MUSI 302H	Music History II	3
Total Hours		16

Minimum Required Grade: C-

3rd year

Rule: All courses required

Note: 3rd year requirements MUSI 395 1 credit Fall semester. MUSI 420 or MUSI 470 for a total of 3 credits.

MUSI 225	Jazz Theory & Improvisation I	2
MUSI 226	Jazz Theory & Improvisation II	2
MUSI 395	Applied Study III (one credit Fall semester)	1
MUSI 420	Jazz Pedagogy	3
or MUSI 470	Jazz Arranging & Composition	
Total Hours		8

Minimum Required Grade: C-

4th year

Rule: All courses required

Note: 4th year requirements: MUSI 420 or MUSI 470 for a total of 3 credits. MUSI 499 2 credits.

All students majoring in music are required to attend in a minimum of 100 approved recitals/concerts prior to graduation. During the 4th year in an undergraduate degree program and upon completion of this requirement, students should register for MUSI 388, 0 cr.

MUSI 388	Concert Attendance UM	0
MUSI 420	Jazz Pedagogy	3
or MUSI 470	Jazz Arranging & Composition	
MUSI 491	Special / Experimental Courses	1-9
MUSI 499	Senior Recital/Capstone Pjt	2
Total Hours		6-14

Minimum Required Grade: C-

BA Requirement Liberal Studies

Rule: All courses required

GH 151L	Introduction to Western Humanities Antiquity	3
GH 152L	Introduction to the Humanities Medieval to Modern	3
Total Hours		6

Minimum Required Grade: C-

Lower Division Writing Expectation

Rule: All courses required

MUSI 302H	Music History II	3
Total Hours		3

Minimum Required Grade: C-

Ensemble Requirements 1st and 2nd year

Rule: one course each semester

Note: All majors seeking an undergraduate degree in music and who are registered for 5 or more credits must participate in an ensemble specified by their degree curriculum each semester of residence of the regular school year. (See specific curricula for maximum ensemble credits applicable toward minimum degree requirements.)

Majors whose principal performance area is wind/percussion must register for:

Select one of the following sections:		1
Section 1, Symphonic Wind Ensemble:		
MUSI 114A	Band: UM Concert Band	
Section 2, University Concert Band:		
MUSI 114A	Band: UM Concert Band	
Section 1, University Orchestra, if designated by the Director, every semester:		
MUSI 108A	Orchestra: UMSO	
Total Hours		1

String majors must register for:

- MUSI 108A section 1, University Orchestra, every semester.

Ensemble requirements for piano and organ are listed separately for each curriculum.

MUSI 108A	Orchestra: UMSO	1
MUSI 114A	Band: UM Concert Band	1
MUSI 162A	Chamber Ensembles I (guitar principals only)	1
MUSI 191	Special / Experimental Courses (piano principals only)	1-9
Total Hours		4-12

Minimum Required Grade: C-

3rd and 4th year Ensemble Requirements

Rule: one course each semester

Note: Ensembles required 1 credit each semester for a year total of 2 credits. All majors seeking an undergraduate degree in music and who are registered for 5 or more credits must participate in an ensemble specified by their degree curriculum each semester of residence of the regular school year. (See specific curricula for maximum ensemble credits applicable toward minimum degree requirements.)

Majors whose principal performance area is wind/percussion must register for:

Select one of the following sections:		1
Section 1, Symphonic Wind Ensemble:		
MUSI 314	Band III: UM Concert Band	
Section 2, University Concert Band:		
MUSI 314	Band III: UM Concert Band	
Section 1, University Orchestra, if designated by the Director, every semester:		
MUSI 308	Orchestras II: UM	
Total Hours		1

String majors must register for:

- MUSI 308 section 1, University Orchestra, every semester

Ensemble requirements for piano and organ are listed separately for each curriculum.

MUSI 308	Orchestras II: UM	1
MUSI 314	Band III: UM Concert Band	1
MUSI 362	Chmbr Ens III: UM	1
Total Hours		3

Minimum Required Grade: C-

Music General Requirement for Writing

Rule: All courses required

Note: Group I: English Writing Skills - WRIT 101

WRIT 101	College Writing I	3
Total Hours		3

Minimum Required Grade: C-

Upper Division Writing Expectation

Rule: All courses required

Note: Upper- Division Writing Expectation (MUSI 416, MUSI 417-Jazz Topics Course)

MUSI 416	Topics in Music History	3
MUSI 417	Cultural Studies in Music	3
Total Hours		6

Minimum Required Grade: C-

Music Requirements for Mathematics

Rule: All courses required

Note: Group II: Mathematics - M Course 100 or above for 3 credits

Minimum Required Grade: C-

3 Total Credits Required

Music Requirements for Modern & Classical Languages

Rule: Must complete 2 years of a foreign language

Minimum Required Grade: C-

10 Total Credits Required

Music Requirements for Expressive Arts

Rule: All courses required

Note: Group IV: Expressive Arts - A Courses - (min. 3 credits) Ensembles and Sec. Lessons taken each semester satisfies this requirement.

Minimum Required Grade: C-

3 Total Credits Required

Music Requirements for Literary & Artistic Studies

Rule: All courses required

Note: Group V: Literary and Artistic Studies - L Courses -(min. 3 credits) MUSI 130L taken in 1st year satisfies this requirement.

Minimum Required Grade: C-

3 Total Credits Required

Music Requirements for Historic & Cultural Studies

Rule: All courses required

MUSI 301H	Music History I	3
MUSI 302H	Music History II	3
Total Hours		6

Minimum Required Grade: C-

Music Requirements for Social Sciences

Rule: All courses required

Note: Group VII: Social Sciences (min. of 3 credits)

Minimum Required Grade: C-

3 Total Credits Required

Music Requirements for Ethical and Human Values

Rule: All courses required

Note: Group VIII: Ethical and Human Values (min. of 3 credits)

Minimum Required Grade: C-

3 Total Credits Required

Music Requirements for Indigenous & Global Perspectives

Rule: All courses required

Note: Group X: Indigenous and Global Perspectives - (min. 3 credits)

Minimum Required Grade: C-

3 Total Credits Required

Music Requirements for Natural Sciences

Rule: All courses required

Note: Group XI: Natural Science (for this perspective, 6 credits required and at least one course Must include a lab experience)

Minimum Required Grade: C-

6 Total Credits Required

This is an advising track only and not an official program as recognized by the University of Montana (UM) or the Montana University System. This information will not appear on your UM transcript, diploma, university lists, student data system, or university publication. You do not fill out a major change for a track.

Music B.A.

Bachelor of Arts - Music

College of Visual & Perf Arts

Degree Specific Credits: 51

Required Cumulative GPA: 2.75

Catalog Year: 2017-2018

Note: 51¹ Credits of non-Music major courses (36 credits Must be in the College of Arts and Sciences)

¹ 51 Credits in Music

All degrees require 39 upper division credits.

General Educational Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

1st year	15
2nd year	16
3rd year	6
4th year	0
Upper Division Writing Expectation	3
Lower Division Writing Expectation	3
Music Requirement for Liberal Studies	8
Music Requirements for Writing	3
Music Requirements for Mathematics	3-5
Music Requirements for Modern & Classical Languages	10
Music Requirements for Expressive Arts	1-4
Music Requirements for Literary & Artistic Studies	3
Music Requirements for Historic & Cultural Studies	6
Music Requirements for Indigenous & Global Perspectives	3

Music Requirements for Natural Sciences	3
Total Hours	83-88

1st year

Rule: All courses required

Note: First year required: MUSI 195 one credit each semester for a total of 2 credits first year.

MUSI 105	Music Theory I	2
MUSI 106	Music Theory II	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 195	Applied Study I (one credit each semester)	2
MUSI 202L	Intro to Music Literature	3
Total Hours		15

Minimum Required Grade: C-

2nd year

Rule: All courses required

Note: Second year required: first year. MUSI 295 one credit each semester for a total of 2 credits second year. MUSI 296 Upper-Division Required Performance required to advance to upper division study.

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 295	Applied Study II (one credit each semester)	2
MUSI 301H	Music History I	3
MUSI 302H	Music History II	3
Total Hours		16

Minimum Required Grade: C-

3rd year

Rule: All courses required

Note: Third year required MUSI 395 one credit each semester for a total of two credits for the third year.

MUSI 356	Form & Analysis I	2
MUSI 357	Form & Analysis II	2
MUSI 395	Applied Study III (one credit each semester)	2
Total Hours		6

Minimum Required Grade: C-

4th year

Rule: All courses required

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 MUSI 388, 0 cr.

MUSI 388	Concert Attendance UM	0
Total Hours		0

Minimum Required Grade: C-

Upper Division Writing Expectation

Rule: 3 credits required chose course below

Select one of the following:	3	
MUSI 415	Music 20th Century to Present	
MUSI 416	Topics in Music History	
MUSI 417	Cultural Studies in Music	
Total Hours		3

Lower Division Writing Expectation

Rule: All courses required

MUSI 302H	Music History II	3
Total Hours		3

Required Grade: C-

Music Requirement for Liberal Studies

Rule: All courses required

GH 151L	Introduction to Western Humanities Antiquity	3
GH 152L	Introduction to the Humanities Medieval to Modern	3
Total Hours		6

Minimum Required Grade: C-

Music Requirements for Writing

Rule: All courses required

WRIT 101	College Writing I	3
Total Hours		3

Minimum Required Grade: C-

Music Requirements for Mathematics

Rule: All courses required

Note: Math - M Course 100 or above

Minimum Required Grade: C-

3-5 Total Credits Required

Music Requirements for Modern & Classical Languages

Rule: All courses required

Note: MCLL (Modern and Classical Languages and Literature) Foreign Languages 10 credits required

Minimum Required Grade: C-

10 Total Credits Required

Music Requirements for Expressive Arts

Rule: All courses required

Note: Expressive Arts - A Courses - (min. 3 credits) Ensembles and Sec. Lessons taken each semester satisfies this requirement.

Minimum Required Grade: C-

1-4 Total Credits Required

Music Requirements for Literary & Artistic Studies

Rule: All courses required

Note: Literary and Artistic Studies - L Courses -(min. 3 credits) MUSI 130L taken in 1st year satisfies this requirement.

Minimum Required Grade: C-

3 Total Credits Required

Music Requirements for Historic & Cultural Studies

Rule: All courses required

Note: Historical and Cultural Studies and American and European Perspectives - H/Y Courses - (min. 3 credits) MUSI 301H and MUSI 302H

MUSI 301H	Music History I	3
MUSI 302H	Music History II	3
Total Hours		6

Minimum Required Grade: C-

Music Requirements for Indigenous & Global Perspectives

Rule: All courses required

Note: Indigenous and Global Perspectives - (min. 3 credits) Recommended MUSI 207H

Minimum Required Grade: C-

3 Total Credits Required

Music Requirements for Natural Sciences

Rule: All courses required

Note: Natural Science (for this perspective, 6 credits required and at least one course Must include a lab experience)

Minimum Required Grade: C-

3 Total Credits Required

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Music B.Mus

Bachelor of Music - Music

College of Visual & Perf Arts

Degree Specific Credits: 85

Required Cumulative GPA: 2.75

Catalog Year: 2017-2018

Note: All Degrees Require 39 Upper-Division Credits

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umd.edu/academics/general-education-requirements>) of the catalog.

Summary

1st year	17
2nd year	20
3rd year	12
4th year	10
Lower Division Writing Expectation	3
Upper Division Writing Expectation	3-9
Music Requirements for Writing	3
Music Requirements for Mathematics	3
Music Requirements for Expressive Arts	3
Music Requirements for Literary & Artistic Studies	3
Music Requirements for Historic & Cultural Studies	3
Music Requirements for Indigenous & Global Perspectives	3
Music Requirements for Natural Sciences	6
Total Hours	89-95

1st year

Rule: All courses required

Note: 1st year required: MUSI 195 3 credits each semester for a total of 6 credits first year.

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 (three credits each semester)	6

MUSI 202L	Intro to Music Literature	3
Total Hours		17

Minimum Required Grade: C-

2nd year

Rule: All courses required

Note: 2nd year required:

- MUSI 295 3 credits each semester for a total of 6 credits second year.
- MUSI 296 Upper-Division Required Performance to be completed before advancing to upper division classes.

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 295	Applied Study II (three credits each semester)	6
MUSI 296	Piano Prof Assessment	0
MUSI 301H	Music History I	3
MUSI 302H	Music History II	3
Total Hours		20

Minimum Required Grade: C-

3rd year

Rule: All courses required

Note: 3rd year required:

- MUSI 362 1 credit each semester for a total of two credits this year.
- MUSI 395 4 credit each semester for a total of 8 credits third year.

MUSI 356	Form & Analysis I	2
MUSI 357	Form & Analysis II	2
MUSI 395	Applied Study III (four credits each semester)	8
Total Hours		12

Minimum Required Grade: C-

4th year

Rule: All courses required

Note: 4th year required:

- MUSI 495 4 credits each semester for a total of 8 credits third year.
- MUSI 499 required for 2 credits Spring semester.

MUSI 388	Concert Attendance UM	0
MUSI 495	Applied Study IV (four credits each semester)	8

MUSI 499	Senior Recital/Capstone Pjt (two credits Spring semester)	2
Total Hours		10

Minimum Required Grade: C-

Lower Division Writing Expectation

Rule: All courses required

MUSI 302H	Music History II	3
Total Hours		3

Minimum Required Grade: C-

Upper Division Writing Expectation

Rule: One course for 3 credits

Select one of the following:		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-

Music Requirements for Writing

Rule: All courses required

WRIT 101	College Writing I	3
Total Hours		3

Minimum Required Grade: C-

Music Requirements for Mathematics

Rule: One course for 3 credits

Note: Mathematics - M Course 100 or above

Minimum Required Grade: C-

3 Total Credits Required

Music Requirements for Expressive Arts

Rule: All courses required

Note: Expressive Arts - A Courses - (min. 3 credits) Ensembles and Sec. Lessons taken each semester satisfies this requirement.

Minimum Required Grade: C-

3 Total Credits Required

Music Requirements for Literary & Artistic Studies

Rule: All courses required

Note: Literary and Artistic Studies - L Courses -(min. 3 credits) MUSI 202L taken in 1st year satisfies this requirement.

MUSI 202L	Intro to Music Literature	3
Total Hours		3

Minimum Required Grade: C-

Music Requirements for Historic & Cultural Studies

Rule: All courses required

Note: Historical and Cultural Studies and American and European Perspectives - H/Y Courses - (min. 3 credits) MUSI 301H and MUSI 302H

Minimum Required Grade: C-

3 Total Credits Required

Music Requirements for Indigenous & Global Perspectives

Rule: All courses required

Note: Indigenous and Global Perspectives - (min. 3 credits) Required MUSI 207H

MUSI 207H	World Music (equiv to 307) (equiv to 307)	3
Total Hours		3

Minimum Required Grade: C-

Music Requirements for Natural Sciences

Rule: All courses required

Note: Group XI: Natural Science (for this perspective, 6 credits required and at least one course Must include a lab experience)

Minimum Required Grade: C-

6 Total Credits Required

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Music Composition

Bachelor of Music - Music; Track: Specialization in Music Composition

• [Print This Page](#)

College of Visual & Perf Arts

Degree Specific Credits: 86

Required Cumulative GPA: 2.75

Catalog Year: 2017-2018

Note: All degrees require 39 upper division credits.

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umn.edu/academics/general-education-requirements>) of the catalog.

Summary

1st year	21
2nd year	24
3rd year	21
4th year	9
Upper Division Writing Expectation	3
1st and 2nd year Ensemble Requirements	4
3rd and 4th year Ensemble Requirements	5-22
Lower Division Writing Expectation	3
Music General Requirement for Writing	3
Music Requirements for Mathematics	3
Music Requirements for Modern & Classical Languages	3
Music Requirements for Expressive Arts	3
Music Requirements for Literary & Artistic Studies	3
Music Requirements for Historic & Cultural Studies	3
Music Requirements for Indigenous & Global Perspectives	3
Music Requirements for Natural Sciences	6
Total Hours	117-134

1st year

Rule: All courses required

Note: 1st year requirements:

- MUSI 195 - 1 credit each semester for a total of 2 credits first year.
- MUSI 180 - 2 credits each semester for a total of four credits first year.

MUSI 105	Music Theory I	2
MUSI 106	Music Theory II	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 180	Composition I (two credits each semester)	4
MUSI 195	Applied Study I (one credit each semester)	2
MUSI 202L	Intro to Music Literature	3
MUST 110	Digital Audio & Multitracking	2
Total Hours		21

Minimum Required Grade: C-

2nd year

Rule: All courses required

Note: 2nd year requirements:

- MUSI 295 - 1 credit each semester for a total of 2 credits second year.
- MUSI 280 - 2 credits each semester for a total of four credits the second year.
- MUSI 296 Upper-Division Required Performance to be completed 2nd year to advance to upper division classes

MUSI 205	Music Theory III	2
MUSI 206	Music Theory IV	2
MUSI 235	Keyboard Skills III	1
MUSI 236	Keyboard Skills IV	1
MUSI 240	Aural Perception III	2
MUSI 241	Aural Perception IV	2
MUSI 280	Composition II (two credits each semester)	4
MUSI 295	Applied Study II (one credit each semester)	2
MUSI 296	Piano Prof Assessment	0
MUSI 301H	Music History I	3
MUSI 302H	Music History II	3
MUST 210	Sequencng, Synthesis, Sampling	2
Total Hours		24

Minimum Required Grade: C-

3rd year

Rule: See commentary

Note: 3rd year requirements:

- MUSI 395 - 1 credit Fall semester.
- MUSI 380 - 3 credits each semester for a total of six credits the third year.
- MUSI 335 or MUSI 336 for 2 credits Spring semester

MUSI 335	Instrumental Conducting (2 credits Spring semester)	2
or MUSI 336	Choral Conducting	
MUSI 356	Form & Analysis I	2
MUSI 357	Form & Analysis II	2
MUSI 380	Composition III (three credits each semester)	6
MUSI 395	Applied Study III (one credit Fall semester)	1
MUSI 407	Counterpoint I	3
MUSI 415	Music 20th Century to Present	3
MUSI 440	Orchestration	2
Total Hours		21

Minimum Required Grade: C-

4th year

Rule: All courses required

Note: 4th year requirements:

- MUSI 499 - 2 credits Spring semester.
- MUSI 480 - 3 credits Fall semester.

All students majoring in music are required to attend in a minimum of 100 approved recitals/concerts prior to graduation. During the 4th year in an undergraduate degree program and upon completion of this requirement, students should register for MUSI 388, 0 cr.

MUSI 388	Concert Attendance UM	0
MUSI 480	Composition IV (3 credits Fall semester)	3
MUSI 499	Senior Recital/Capstone Pjt (2 credits Spring semester)	2
MUST 310	Interactivity Digitl Sgnl Proc	2
MUST 410	Computer Music Programming	2
Total Hours		9

Minimum Required Grade: C-

Upper Division Writing Expectation

Rule: All courses required

Note: MUSI 415 will satisfy the upper-division writing expectation.

MUSI 415	Music 20th Century to Present	3
Total Hours		3

Minimum Required Grade: C-

1st and 2nd year Ensemble Requirements

Rule: One course each semester

Note: Ensembles - MUSI 108A-MUSI 114A, MUSI 162A (guitar principals only), MUSI 191 (piano principals only), required one credit each semester for two credits each year. All majors seeking an undergraduate degree in music and who are registered for 5 or more credits must participate in an ensemble specified by their degree curriculum each semester of residence of the regular school year. (See specific curricula for maximum ensemble credits applicable toward minimum degree requirements.)

Majors whose principal performance area is wind/percussion must register for:

Select one of the following sections:	1	
Section 1, Symphonic Wind Ensemble:		
MUSI 114A	Band: UM Concert Band	
Section 2, University Concert Band:		
MUSI 114A	Band: UM Concert Band	
Section 1, University Orchestra, if designated by the Director, every semester:		
MUSI 108A	Orchestra: UMSO	
Total Hours		1

String majors must register for:

- MUSI 108A section 1, University Orchestra, every semester.

MUSI 108A	Orchestra: UMSO	1
MUSI 110A	Opera Theatre I	1
MUSI 112A	Choir	1

MUSI 114A	Band: UM Concert Band	1
Total Hours		4

Minimum Required Grade: C-

3rd and 4th year Ensemble Requirements

Rule: One course each semester

Note: MUSI 308-MUSI 314, MUSI 310, MUSI 331, OR MUSI 362 (guitar principals only), MUSI 391 (piano principals only), required one credit each semester for two credits third year, fourth year 1 credit Fall Semester.

All majors seeking an undergraduate degree in music and who are registered for 5 or more credits must participate in an ensemble specified by their degree curriculum each semester of residence of the regular school year. (See specific curricula for maximum ensemble credits applicable toward minimum degree requirements.)

Majors whose principal performance area is wind/percussion must register for:

Select one of the following sections:	1
Section 1, Symphonic Wind Ensemble:	
MUSI 314	Band III: UM Concert Band
Section 2, University Concert Band:	
MUSI 314	Band III: UM Concert Band
Section 1, University Orchestra, if designated by the Director, every semester:	
MUSI 308	Orchestras II: UM
Total Hours	1

String majors must register for:

- MUSI 308 section 1, University Orchestra, every semester.

Ensemble requirements for piano and organ are listed separately for each curriculum.

MUSI 308	Orchestras II: UM	1
MUSI 310	Opera Theatre II	1
MUSI 312	Choir III	1-8
MUSI 314	Band III: UM Concert Band	1
MUSI 331	Jzz Ens II: UM	1
MUSI 362	Chmbr Ens III: UM (guitar principals only)	1
MUSI 391	Special / Experimental Courses (piano principals only)	1-9
Total Hours		7-22

Minimum Required Grade: C-

Lower Division Writing Expectation

Rule: All courses required

MUSI 302H	Music History II	3
Total Hours		3

Minimum Required Grade: C-

Music General Requirement for Writing

Rule: All courses required

WRIT 101	College Writing I	3
Total Hours		3

Minimum Required Grade: C-

Music Requirements for Mathematics

Rule: All courses required

Note: Math - M Course 100 or above

Minimum Required Grade: C-

3 Total Credits Required

Music Requirements for Modern & Classical Languages

Rule: All courses required

Note: Exemption from Modern and Classical Language Requirement - Symbolic Systems MUSI 105, MUSI 140, MUSI 141

Minimum Required Grade: C-

Music Requirements for Expressive Arts

Rule: All courses required

Note: Expressive Arts - A Courses - (min. 3 credits) Ensembles and Sec. Lessons taken each semester satisfies this requirement.

Minimum Required Grade: C-

Music Requirements for Literary & Artistic Studies

Rule: All courses required

Note: Literary and Artistic Studies - L Courses - (min. 3 credits) MUSI 202L taken in 1st year satisfies this requirement.

Minimum Required Grade: C-

Music Requirements for Historic & Cultural Studies

Rule: All courses required

Note: Historical and Cultural Studies and American and European Perspectives - H/Y Courses - (min. 3 credits) MUSI 301H and MUSI 302H

Minimum Required Grade: C-

Music Requirements for Indigenous & Global Perspectives

Rule: All courses required

Note: Indigenous and Global Perspectives - (min. 3 credits) is required

MUSI 207H	World Music (equiv to 307) (equiv to 307)	3
Total Hours		3

Minimum Required Grade: C-

Music Requirements for Natural Sciences

Rule: All courses required

Note: Natural Science (for this perspective, 6 credits required and at least one course Must include a lab experience)

Minimum Required Grade: C-

6 Total Credits Required

This is an advising track only and not an official program as recognized by the University of Montana (UM) or the Montana University System. This information will not appear on your UM transcript, diploma, university lists, student data system, or university publication. You do not fill out a major change for a track.

Music Education B.A.

Bachelor of Music Education - Music Education

College of Visual & Perf Arts

Degree Specific Credits: 72

Required Cumulative GPA: 2.75

Catalog Year: 2017-2018

Note: All Music Degrees require 39 upper division credits

- Keyboard principals do not take MUSI 135A-MUSI 136A but Must take MUSI 332 and MUSI 435 in addition to upper-division electives, +offered even - numbered years in autumn
- Keyboard/Voice - 3 credits, Orchestra principals - 2 credits

Students must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Curriculum and Instruction (p. 95) 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 (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

1st year	19
2nd year	22-23
3rd year	16
4th year	3
3rd and 4th Year Education Department Requirements	26
1st and 2nd year Education Requirements	3
1st and 2nd year Ensembles	4-14

3rd and 4th year Ensembles	4-21
Music Required English Writing Skills	3
Upper Division Writing Expectation	3
Lower Division Writing Expectation	3
Music Requirements for Mathematics	3
Music Requirements for Modern & Classical Languages	3
Music Requirements for Symbolic Systems	3
Music Requirements for Expressive Arts	3
Music Requirements for Literary & Artistic Studies	3
Music Requirements for Historic & Cultural Studies	3
Music Requirements for Social Sciences	3
Music Requirements for Ethical and Human Values	3
Music Requirements for Indigenous & Global Perspectives	3
Music Requirements for Natural Sciences	6
Total Hours	139-167

1st year

Rule: See commentary

Note: 1st year requirements:

- MUSI 195 1 credit each semester for a total of 2 credits first year.
- First year must include MUSE 120-MUSE 121 or MUSE 275

Select one of the following:	2
MUSE 120 & MUSE 121	Techs: String Inst in Class I and Techs: String Inst in Class II
MUSE 274 & MUSE 275	Techniques: Upper Brass and Techniques: Lower Brass
MUSE 123	Techniques: Voice
MUSI 105	Music Theory I
MUSI 106	Music Theory II
MUSI 135A	Keyboard Skills I
MUSI 136A	Keyboard Skills II
MUSI 140	Aural Perception I
MUSI 141	Aural Perception II
MUSI 155A	Marching: Grizzly Marchng Band (All BME Keyboard, Voice, and String principals required to take only one credit)
MUSI 195	Applied Study I (one credit each semester)
MUSI 202L	Intro to Music Literature
Total Hours	19

Minimum Required Grade: C-

2nd year

Rule: See commentary

Note: 2nd year BME classes required:

- MUSI 295 1 credit each semester for a total of 2 credits 2nd year.
- Also required for 2nd year MUSE 120-MUSE 121 or MUSE 274, MUSE 275 for a total of 2 credits.

- In the second year of classes MUSI 296 Upper Division Required Performance must be completed to move on to upper division classes.
- Apply for admission to Teacher Education Program during second year.
- String Voice, and Piano principals required to take only 1 credit of MUSI 155A.

Select one of the following: 2

MUSE 120 & MUSE 121	Techs: String Inst in Class I and Techs: String Inst in Class II	
MUSE 274	Techniques: Upper Brass	
MUSE 275	Techniques: Lower Brass	
MUSE 272	Techniques: Flute & Single Reed	1
MUSE 273	Techniques: Double Reed	1
MUSI 155A	Marching: Grizzly Marching Band (String Voice, and Piano principals required to take only one credit)	0-1
MUSI 195	Applied Study I (one credit each semester)	2
MUSI 205	Music Theory III	2
MUSI 206	Music Theory IV	2
MUSI 235	Keyboard Skills III	1
MUSI 236	Keyboard Skills IV	1
MUSI 240	Aural Perception III	2
MUSI 241	Aural Perception IV	2
MUSI 296	Piano Prof Assessment	0
MUSI 301H	Music History I	3
MUSI 302H	Music History II	3
Total Hours		22-23

Minimum Required Grade: C-

3rd year

Rule: All courses required

Note: Required for 3rd year BME study:

- MUSI 395 1 credit for Fall semester the third year.
- MUSI 102A for 1 credit Spring semester the third year.

MUSE 126	Techs: Percussn Instruments I	1
MUSE 127	Techs: Percussn Instruments II	1
MUSE 333	Gen Music Methods & Materls I	2
MUSE 334	Gen Music Methods & Materls II	2
MUSE 497	Methods: Choral & Literature	2
MUSI 102A	Performance Study (one credit Spring semester)	1
MUSI 335	Instrumental Conducting	2
MUSI 336	Choral Conducting	2
MUSI 395	Applied Study III (one credit for Fall semester)	1
MUSI 440	Orchestration	2
Total Hours		16

Minimum Required Grade: C-

4th year

Rule: All courses required

Note: Required for 4th year BME study: MUSI 102A one credit Fall semester for the fourth year study.

All students majoring in music are required to attend in a minimum of 100 approved recitals/concerts prior to graduation. During the 4th year in an undergraduate degree program and upon completion of this requirement, students should register for MUSI 388, 0 cr.

MUSE 425	Technology and Materials	2
MUSI 102A	Performance Study (one credit Fall semester)	1
MUSI 388	Concert Attendance UM	0
Total Hours		3

Minimum Required Grade: C-

3rd and 4th Year Education Department Requirements

Rule: All courses required

Note: Students must be formally admitted to the Teacher Education Program to take Education courses. See the Department of Curriculum and Instruction (p. 95) in the College of Education and Human Sciences for more information. EDU 494 is taken for 1 credit and EDU 495 is taken for 14 credits. These two education classes are taken the last semester of study.

EDU 202	Early Field Experience	1
EDU 221	Ed Psych & Measuremnt	3
EDU 345	Excptnlty & Clsrm Mgmt	3
EDU 395	Clinical Experience	1
EDU 407E	Ethics & Policy Issues	3
EDU 494	Seminar:Refl Pract & App Rsrch (take the last semester of study)	1
EDU 495	Student Teaching (take the last semester of study)	14
Total Hours		26

Minimum Required Grade: C-

1st and 2nd year Education Requirements

Rule: Course required

Note: Apply for Admission to Teacher Education Program during second year

Minimum Required Grade: C-

1st and 2nd year Ensembles

Rule: All courses required

Note: Ensembles - MUSI 108A-MUSI 114A, MUSI 162A (guitar principals only), MUSI 191 (piano principals only), required one credit each semester for two credits each year.

All majors seeking an undergraduate degree in music and who are registered for 5 or more credits must participate in an ensemble specified by their degree curriculum each semester of residence of the regular school year. (See specific curricula for maximum ensemble credits applicable toward minimum degree requirements.)

Majors whose principal performance area is wind/percussion must register for:

Select one of the following sections:	1
Section 1, Symphonic Wind Ensemble:	
MUSI 114A Band: UM Concert Band	
Section 2, University Concert Band:	
MUSI 114A Band: UM Concert Band	
Section 1, University Orchestra, if designated by the Director, every semester:	
MUSI 108A Orchestra: UMSO	
Total Hours	1

String majors must register for:

- MUSI 108A section 1, University Orchestra, every semester.

B.M.E. voice majors must take a minimum of:

- 6 credits in MUSI 112A (section 1 (University Choir))

Ensemble requirements for piano and organ are listed separately for each curriculum.

MUSI 108A	Orchestra: UMSO	1
MUSI 110A	Opera Theatre I	1
MUSI 112A	Choir	1
MUSI 114A	Band: UM Concert Band	1
MUSI 162A	Chamber Ensembles I (guitar principals only)	1
MUSI 191	Special / Experimental Courses (piano principals only)	1-9
Total Hours		6-14

Minimum Required Grade: C-

3rd and 4th year Ensembles

Rule: All courses required

Note: MUSI 308-MUSI 114A, MUSI 362A (guitar principals only), MUSI 391 (piano principals only), 1 credit each semester for a total of two credits the third year. 4th year 1 credit fall semester.

MUSI 308	Orchestras II: UM	1
MUSI 310	Opera Theatre II	1
MUSI 312	Choir III	1-8
MUSI 314	Band III: UM Concert Band	1
MUSI 362	Chmbr Ens III: UM (guitar principals only)	1
MUSI 491	Special / Experimental Courses (piano principals only)	1-9
Total Hours		6-21

Minimum Required Grade: C-

Music Required English Writing Skills

Rule: All courses required

WRIT 101	College Writing I	3
Total Hours		3

Minimum Required Grade: C-

Upper Division Writing Expectation

Rule: One course for 3 credits required

Note: You should take a 400 level (415, 416 or 417) Music History writing class to satisfy the upper-division writing expectation for 3 credits.

Select one of the following:	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-

Lower Division Writing Expectation

Rule: All courses required

MUSI 302H	Music History II	3
Total Hours		3

Minimum Required Grade: C-

Music Requirements for Mathematics

Rule: All courses required

Note: M course 100 or above

Minimum Required Grade: C-

3 Total Credits Required

Music Requirements for Modern & Classical Languages

Rule: All courses required

Note: Exception to Modern and Classical Language Requirement-Symbolic Systems - MUSI 105, MUSI 106, MUSI 140, MUSI 141

Minimum Required Grade: C-

Music Requirements for Symbolic Systems

Rule: All courses required

Note: The competency for Symbolic Systems is also satisfied within the music major curriculum. MUSI 302H satisfies your lower-division writing requirement.

Minimum Required Grade: C-

Music Requirements for Expressive Arts

Rule: All courses required

Note: A Courses - (min. of 3 credits) Ensembles taken each semester satisfy this requirement.

Minimum Required Grade: C-

Music Requirements for Literary & Artistic Studies

Rule: All courses required

Note: Literary and Artistic Studies - L Courses - (min. of 3 credits) MUSI 202L taken in the 1st year satisfies this requirement.

Minimum Required Grade: C-

Music Requirements for Historic & Cultural Studies

Rule: All courses required

Note: Historical and Cultural Studies and American and European Perspectives - H/Y Course - (min. of 3 credits) MUSI 301H - MUSI 302H taken in the 2nd year satisfy this requirement.

Minimum Required Grade: C-

Music Requirements for Social Sciences

Rule: All courses required

Note: Social Sciences - S Courses - (min. of 3 credits)

Minimum Required Grade: C-

3 Total Credits Required

Music Requirements for Ethical and Human Values

Rule: All courses required

Note: Ethical and Human Values - E Courses - (min. of 3 credits) EDU 407E taken the 3rd or 4th year satisfies this requirement.

Minimum Required Grade: C-

3 Total Credits Required

Music Requirements for Indigenous & Global Perspectives

Rule: All courses required

Note: Indigenous and Global Perspectives - X Courses - (min. of 3 credits) A Native American Studies Course with an X is required for Education Degree. NASX 105H is recommended.

Minimum Required Grade: C-

3 Total Credits Required

Music Requirements for Natural Sciences

Rule: All courses required

Note: Natural Science - N Courses - 6 credits, choice made from course catalog credits required and at least one course must include a lab experience

Minimum Required Grade: C-

6 Total Credits Required

Music History

Bachelor of Arts - Music; Track: Specialization in Music History

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College of Visual & Perf Arts

Degree Specific Credits: 51

Required Cumulative GPA: 2.75

Catalog Year: 2017-2018

Note: 51¹ Credits of non-Music major courses (36 credits Must be in the College of Arts and Sciences)

¹ 51 Credits in Music

All degrees require 39 upper division credits.

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umd.edu/academics/general-education-requirements>) of the catalog.

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Music Requirements for Literary & Artistic Studies	8
Music Requirements for Historic & Cultural Studies	3
Music Requirements for Indigenous & Global Perspectives	3
Music Requirements for Natural Sciences	6
Total Hours	96-109

First year

Rule: All courses required

Note: 1st year requirements:

- MUSI 195 1 credit each semester for a total of 2 credits first year.

MUSI 105	Music Theory I	2
MUSI 106	Music Theory II	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 195	Applied Study I (one credit each semester)	2
MUSI 202L	Intro to Music Literature	3
MUSI 207H	World Music (equiv to 307) (equiv to 307)	3
Total Hours		18

Minimum Required Grade: C-

2nd year

Rule: All courses required

Note: 2nd year Required: MUSI 296-01 Upper-Division Required Performance is required by the end for 2nd year of study to advance to upper division classes.

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 301H	Music History I	3
MUSI 302H	Music History II	3
Total Hours		14

Minimum Required Grade: C-

3rd year

Rule: All courses required

Note: 3rd year required: MUSI 416 or MUSI 417 for 3 credits is required.

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
or MUSI 417	Cultural Studies in Music	
Total Hours		10

Minimum Required Grade: C-

4th year

Rule: All courses required

Note: 4th year required:

- MUSI 499 2 credits required Spring semester.
- MUSI 416 or MUSI 417 required for 3 credits.

All students majoring in music are required to attend in a minimum of 100 approved recitals/concerts prior to graduation. During the 4th year in an

undergraduate degree program and upon completion of this requirement, students should register for MUSI 388, 0 cr.

MUSI 388	Concert Attendance UM	0
MUSI 416	Topics in Music History	3
or MUSI 417	Cultural Studies in Music	
MUSI 499	Senior Recital/Capstone Pjt (two credits Spring semester)	2
Total Hours		5

Minimum Required Grade: C-

Upper Division Writing Expectation

Rule: One course for 3 credits

Select one of the following:		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-

1st year Ensemble Requirements

Rule: One course each semester

Note: MUSI 108A-MUSI 114A, MUSI 162A (guitar principals only), MUSI 191 (piano principals only), one credit each semester for a total of two credits 1st year.

All majors seeking an undergraduate degree in music and who are registered for 5 or more credits must participate in an ensemble specified by their degree curriculum each semester of residence of the regular school year. (See specific curricula for maximum ensemble credits applicable toward minimum degree requirements.)

Majors whose principal performance area is wind/percussion must register for:

Select one of the following sections:		1
Section 1, Symphonic Wind Ensemble:		
MUSI 114A	Band: UM Concert Band	
Section 2, University Concert Band:		
MUSI 114A	Band: UM Concert Band	
Section 1, University Orchestra, if designated by the Director, every semester:		
MUSI 108A	Orchestra: UMSO	
Total Hours		1

String majors must register for:

- MUSI 108A section 1, University Orchestra, every semester.

B.M., Vocal Performance, and B.A., voice, majors must register for:

- a minimum of 4 credits in MUSI 112A section 1 (University Choir).

Ensemble requirements for piano and organ are listed separately for each curriculum.

MUSI 108A	Orchestra: UMSO	1
MUSI 110A	Opera Theatre I	1
MUSI 112A	Choir	1
MUSI 114A	Band: UM Concert Band	1
MUSI 162A	Chamber Ensembles I (guitar principals only)	1
MUSI 191	Special / Experimental Courses (piano principals only)	1-9
Total Hours		6-14

Minimum Required Grade: C-

Lower Division Writing Expectation

Rule: All courses required

Note: Lower- Division Writing Expectation MUSI 302H

MUSI 302H	Music History II	3
Total Hours		3

Minimum Required Grade: C-

Music Requirements for Writing

Rule: All courses required

WRIT 101	College Writing I	3
Total Hours		3

Minimum Required Grade: C-

Music Requirements for Mathematics

Rule: All courses required

Note: Mathematics - M Course 100 or above

Minimum Required Grade: C-

3 Total Credits Required

Music Requirements for Modern & Classical Languages

Rule: All courses required

Note: MCLL (Modern and Classical Languages and Literature) Foreign Languages for 10 credits Exemption from Modern and Classical Language Requirement - Symbolic Systems MUSI 105, MUSI 106, MUSI 140, MUSI 141

Minimum Required Grade: C-

10 Total Credits Required

Music Requirements for Expressive Arts

Rule: All courses required

Note: Expressive Arts - A Courses - (min. 3 credits) Ensembles and Sec. Lessons taken each semester satisfies this requirement.

Minimum Required Grade: C-

3 Total Credits Required

Music Requirements for Literary & Artistic Studies

Rule: All courses required

Literary and Artistic Studies - L Courses - (min. 3 credits) MUSI 202L taken in 1st year satisfies this requirement.

GH 151L	Introduction to Western Humanities Antiquity	3
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GH 152L	Introduction to the Humanities Medieval to Modern	3
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Total Hours		6
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Minimum Required Grade: C-

Music Requirements for Historic & Cultural Studies

Rule: All courses required

Note: Group VI and Group IX: Historical and Cultural Studies and American and European Perspectives - H/Y Courses - (min. 3 credits) MUSI 301H and MUSI 302H

Minimum Required Grade: C-

Music Requirements for Indigenous & Global Perspectives

Rule: All courses required

Note: Indigenous and Global Perspectives - (min. 3 credits) MUSI 207H

Minimum Required Grade: C-

Music Requirements for Natural Sciences

Rule: All courses required

Note: Group XI: Natural Science (for this perspective, 6 credits required and at least one course Must include a lab experience)

Minimum Required Grade: C-

6 Total Credits Required

This is an advising track only and not an official program as recognized by the University of Montana (UM) or the Montana University System. This information will not appear on your UM transcript, diploma, university lists, student data system, or university publication. You do not fill out a major change for a track.

Music Minor

Minor - Music

College of Visual & Perf Arts

Degree Specific Credits: 27

Required Cumulative GPA: 2.75

Catalog Year: 2017-2018

Note: Electives are to allow for emphasis in a particular area of Music study and must include course work at the upper-division level.

Upper-division course work normally requires a pre-requisite. Please see the University general catalog for details.

Consent of instructor will be required if all prerequisites have not been met.

To receive an academic minor in Music the student Must earn at least 27 credits to include the following:

MUSI 202L	Intro to Music Literature	3
MUSI 195	Applied Study I	2
Select 2 credits from the following:		2
MUSI 112A	Choir (Choral Ensembles)	
MUSI 108A	Orchestra: UMSO	
MUSI 155A	Marching: Grizzly Marchng Band	
MUSI 112A	Choir (Concert Bands)	
MUSI 110A	Opera Theatre I (Opera Theater)	
MUSI 131A	Jazz Ensemble I: UM Jazz Bands (UM Jazz Bands)	
MUSI 162A & MUSI 195	Chamber Ensembles I and Applied Study I	
MUSI 105	Music Theory I	2
MUSI 106	Music Theory II	2
MUSI 140	Aural Perception I	2
MUSI 141	Aural Perception II	2
Music electives approved in advance by the School of Music, Director		12
Total Hours		27

Summary

Required for a Minor in Music	11
Minor in Music Elective Options	12
Performance	
Theory	
Music Theory	
Composition	
Technology	
Total Hours	23

Required for a Minor in Music

Rule: All courses required

Note: MUSI 108A-MUSI 114A, MUSI 162A (guitar principals only), MUSI 191 (piano principals only). Ensembles for one credit each semester for a total of 2 credits each year.

Ensembles must be taken concurrently with MUSI 195. MUSI 195 1 credit each semester for a total of 2 credits for the year. Music electives approved by Director of the School 12 credits. See elective options.

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 202L	Intro to Music Literature	3
Total Hours		11

Minimum Required Grade: C-

Minor in Music Elective Options - Performance

Rule: All courses required

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 108A-MUSI 314, MUSI 362A, MUSI 391 Ensembles for four credits must be taken concurrently with MUSI 295, MUSI 395.
- Music Electives may be selected from MUSI 301H, MUSI 205-MUSI 206 or from 300-400 level performance or academic classes for four credits.

Minimum Required Grade: C-

12 Total Credits Required

Minor in Music Elective Options - Theory

Rule: All courses required

Note: MUSI 356-MUSI 357 for 4 credits, 3 crs + 1 cr. elective

MUSI 205	Music Theory III	2
MUSI 206	Music Theory IV	2
MUSI 240	Aural Perception III	2
MUSI 241	Aural Perception IV	2
Select one of the following:		4

MUSI 356 Form & Analysis I
& MUSI 357 and Form & Analysis II
plus one credit elective

Total Hours 12

Minimum Required Grade: C-

Minor in Music Elective Options - Music History

Rule: All courses required

Note:

- MUSI 415-MUSI 417 Courses for 6 credits and Theory or Literature electives for 3 credits.
- Although worth 4 crs., MUSI 205-MUSI 206 is strongly recommended to fulfill the Theory/Literature electives.

MUSI 301H	Music History I	3
Select 6 credits from the following:		6
MUSI 415	Music 20th Century to Present	
MUSI 416	Topics in Music History	

MUSI 417	Cultural Studies in Music	
Theory or Literature electives (MUSI 205-MUSI 206 strongly recommended)		3
Total Hours		12

Minimum Required Grade: C-

Minor in Music Elective Options - Composition

Rule: All courses required

Note:

- MUSI 180 1 credit each semester for a total of 2 credits each year for total of 4 credits,
- MUSI 280 1 credit each semester for a total of 2 credits each year for total of 4 credits.

MUSI 135A	Keyboard Skills I	1
MUSI 180	Composition I (1 credit each semester for a total of 2 credits each year for total of 4 credits)	4
MUSI 207H	World Music (equiv to 307)	3
MUSI 280	Composition II (1 credit each semester for a total of 2 credits each year for total of 4 credits)	4
Total Hours		12

Minimum Required Grade: C-

Minor in Music Elective Options - Technology

Rule: All courses required

Note: Music Technology

MUST 110	Digital Audio & Multitracking	2
MUST 210	Sequencng, Synthesis, Sampling	2
MUST 310	Interactivity Digitl Sgnl Proc	2
MUST 227A	Mtn Electroacoustic Lptp Ens I	1
MUSI 207H	World Music (equiv to 307)	3
MUST 410	Computer Music Programming	2
Total Hours		12

Minimum Required Grade: C-

Musical Studies

Bachelor of Arts - Music; Track: Specialization in Musical Studies

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College of Visual & Perf Arts

Degree Specific Credits: 51

Required Cumulative GPA: 2.75

Catalog Year: 2017-2018

Note: 51¹ Credits of non-Music major courses (36 credits must be in the College of Arts and Sciences)

¹ 51 Credits in Music

All degrees require 39 upper division credits.

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umd.edu/academics/general-education-requirements>) of the catalog.

Summary

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Music Requirements for Expressive Arts	3
Music Requirements for Literary & Artistic Studies	3
Music Requirements for Historic & Cultural Studies	3
Music Requirements for Indigenous & Global Perspectives	3
Music Requirements for Natural Sciences	6
Total Hours	108-135

1st year

Rule: All courses required

Note: MUSI 195 1 credit each semester for a total of 2 credits first year.

MUSI 105	Music Theory I	2
MUSI 106	Music Theory II	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 195	Applied Study I (one credit each semester)	2
MUSI 202L	Intro to Music Literature	3
Total Hours		15

Minimum Required Grade: C-

2nd year

Rule: All courses required

Note: MUSI 295 1 credit each semester for a total of 2 credits first year. MUSI 296 Upper-Division Required Performance must be completed to advance on to upper division classes.

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 295	Applied Study II (one credit each semester)	2
MUSI 301H	Music History I	3
MUSI 302H	Music History II	3
Total Hours		16

Minimum Required Grade: C-

3rd year

Rule: All courses required

Note: Upper-Division MUSIC Electives should include MUSI 415, MUSI 416, or MUSI 417 for 6 credits. MUSI 395 1 credit Fall semester for the third year.

MUSI 356	Form & Analysis I	2
MUSI 357	Form & Analysis II	2
MUSI 395	Applied Study III (one credit Fall semester)	1
Select 6 credits from the following:		6
MUSI 415	Music 20th Century to Present	
MUSI 416	Topics in Music History	
MUSI 417	Cultural Studies in Music	
Total Hours		11

Minimum Required Grade: C-

4th year

Rule: All courses required

Note: Upper-Division Music electives required 4 credits. All students majoring in music are required to attend in a minimum of 100 approved recitals/concerts prior to graduation. During the 4th year in an undergraduate degree program and upon completion of this requirement, students should register for MUSI 388, 0 cr.

MUSI 388	Concert Attendance UM	0
Upper-Division Music electives		4
Total Hours		4

Minimum Required Grade: C-

1st and 2nd year Ensemble Requirements

Rule: One course each semester

Note: Ensembles Required MUSI 108A-MUSI 114A, MUSI 162A (guitar principals only), MUSI 191 (piano principals only), one credit each semester for a total of two credits each year.

All majors seeking an undergraduate degree in music and who are registered for 5 or more credits must participate in an ensemble specified

by their degree curriculum each semester of residence of the regular school year. (See specific curricula for maximum ensemble credits applicable toward minimum degree requirements.)

Majors whose principal performance area is wind/percussion must register for:

Select one of the following sections:		1
Section 1, Symphonic Wind Ensemble:		
MUSI 114A	Band: UM Concert Band	
Section 2, University Concert Band:		
MUSI 114A	Band: UM Concert Band	
Section 1, University Orchestra, if designated by the Director, every semester:		
MUSI 108A	Orchestra: UMSO	
Total Hours		1

String majors must register for:

- MUSI 108A section 1, University Orchestra, every semester.

Vocal Performance, and B.A., voice, majors must register for:

- a minimum of 4 credits in MUSI 112A section 1 (University Choir).

Ensemble requirements for piano and organ are listed separately for each curriculum.

MUSI 108A	Orchestra: UMSO	1
MUSI 110A	Opera Theatre I	1
MUSI 112A	Choir	1
MUSI 114A	Band: UM Concert Band	1
MUSI 162A	Chamber Ensembles I (guitar principals only)	1
MUSI 191	Special / Experimental Courses (piano principals only)	1-9
Total Hours		6-14

Minimum Required Grade: C-

Music Requirements

Rule: All courses required

GH 151L	Introduction to Western Humanities Antiquity	3
GH 152L	Introduction to the Humanities Medieval to Modern	3
Total Hours		6

Minimum Required Grade: C-

Ensembles 3rd year

Rule: One course each semester

Note: Ensembles required MUSI 308-MUSI 314, MUSI 310, MUSI 362A (guitar principals only), MUSI 491 (piano principals only), one credit each semester for a year total of two credits.

All majors seeking an undergraduate degree in music and who are registered for 5 or more credits must participate in an ensemble specified by their degree curriculum each semester of residence of the regular school year. (See specific curricula for maximum ensemble credits applicable toward minimum degree requirements.)

Majors whose principal performance area is wind/percussion must register for:

Select one of the following sections:	1
Section 1, Symphonic Wind Ensemble:	
MUSI 314 Band III: UM Concert Band	
Section 2, University Concert Band:	
MUSI 314 Band III: UM Concert Band	
Section 1, University Orchestra, if designated by the Director, every semester:	
MUSI 308 Orchestras II: UM	
Total Hours	1

String majors must register for:

- MUSI 308 section 1, University Orchestra, every semester.

Vocal Performance, and B.A., voice, majors must register for:

- a minimum of 4 credits in MUSI 312 section 1 (University Choir).

Ensemble requirements for piano and organ are listed separately for each curriculum.

MUSI 308 Orchestras II: UM	1
MUSI 310 Opera Theatre II	1
MUSI 312 Choir III	1-8
MUSI 314 Band III: UM Concert Band	1
MUSI 362 Chmbr Ens III: UM (guitar principals only)	1
MUSI 491 Special / Experimental Courses (piano principals only)	1-9
Total Hours	6-21

Minimum Required Grade: C-

Music Requirements for Writing

Rule: All courses required

WRIT 101 College Writing I	3
Total Hours	3

Minimum Required Grade: C-

Lower Division Writing Expectation

Rule: All courses required

MUSI 302H Music History II	3
Total Hours	3

Minimum Required Grade: C-

Upper Division Writing Expectation

Rule: All courses required

MUSI 415 Music 20th Century to Present	3
MUSI 416 Topics in Music History	3
MUSI 417 Cultural Studies in Music	3
Total Hours	9

Minimum Required Grade: C-

Music Requirements for Mathematics

Rule: All courses required

Note: Mathematics - M Course 100 or above

Minimum Required Grade: C-

3 Total Credits Required

Music Requirements for Modern & Classical Languages

Rule: All courses required

Note: MCLL (Modern and Classical Languages and Literature) Foreign Languages 10 credits

Minimum Required Grade: C-

10 Total Credits Required

Music Requirements for Expressive Arts

Rule: All courses required

Note: Expressive Arts - A Courses - (min. 3 credits) Ensembles and Sec. Lessons taken each semester satisfies this requirement.

Minimum Required Grade: C-

3 Total Credits Required

Music Requirements for Literary & Artistic Studies

Rule: All courses required

Note: Expressive Arts - A Courses - (min. 3 credits) Ensembles and Sec. Lessons taken each semester satisfies this requirement.

Minimum Required Grade: C-

Music Requirements for Historic & Cultural Studies

Rule: All courses required

Note: Historical and Cultural Studies and American and European Perspectives - H/Y Courses - (min. 3 credits) MUSI 301H, MUSI 302H

Minimum Required Grade: C-

3 Total Credits Required

Music Requirements for Indigenous & Global Perspectives

Rule: All courses required

Note: Indigenous and Global Perspectives - (min. 3 credits) Recommend MUSI 207H

MUSI 207H	World Music (equiv to 307)	3
Total Hours		3

Minimum Required Grade: C-

Music Requirements for Natural Sciences

Rule: All courses required

Note: Group XI: Natural Science (for this perspective, 6 credits required and at least one course Must include a lab experience)

Minimum Required Grade: C-

6 Total Credits Required

This is an advising track only and not an official program as recognized by the University of Montana (UM) or the Montana University System. This information will not appear on your UM transcript, diploma, university lists, student data system, or university publication. You do not fill out a major change for a track.

Organ Performance

Bachelor of Music - Music; Track: Specialization in Organ Performance

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College of Visual & Perf Arts

Degree Specific Credits: 83

Required Cumulative GPA: 2.75

Catalog Year: 2017-2018

Note: All Degrees Require 39 Upper-Division Credits.

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

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Upper Division Writing Expectation	3
Music Requirements for Writing	3
Music Requirements for Mathematics	3
Music Requirements for Modern & Classical Languages	10
Music Requirements for Expressive Arts	3
Music Requirements for Literary & Artistic Studies	3
Music Requirements for Historic & Cultural Studies	3-6
Music Requirements for Indigenous & Global Perspectives	3
Music Requirements for Natural Sciences	6
Total Hours	128-153

1st year

Rule: All courses required

Note: 1st year requirements: MUSI 195 3 credits each semester for a total of 6 credits first year.

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 (3 credits each semester)	6
MUSI 202L	Intro to Music Literature	3
Total Hours		17

Minimum Required Grade: C-

2nd year

Rule: All courses required

Note: 2nd year requirements:

- MUSI 295 3 credits each semester for a total of 6 credits second year.
- MUSI 102A 1 credit each semester for a total of 2 credits second year.
- MUSI 296 Upper-Division Required Performance required for advancement to upper division classes.

MUSI 102A	Performance Study (one credit each semester)	2
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 295	Applied Study II (3 credits each semester)	6
MUSI 296	Piano Prof Assessment	0
MUSI 301H	Music History I	3
MUSI 302H	Music History II	3
Total Hours		22

Minimum Required Grade: C-

3rd year

Rule: All courses required

Note: 3rd year required: MUSI 395 4 credits each semester for a total of 8 credits third year.

MUSI 332	Advanced Functional Piano	1
MUSI 336	Choral Conducting	2
MUSI 395	Applied Study III (4 credits each semester)	8
MUSI 435	Piano Methods & Materials I	3
MUSI 436	Piano Methods & Materials II	3
Total Hours		17

Minimum Required Grade: C-

4th year

Rule: All courses required

Note: 4th year required:

- MUSI 495 4 credits each semester for a total of 8 credits 4th year.
- MUSI 492
- MUSI 499 for two credits.

Senior recital may be two half-recitals. One half recital may include pedagogical lecture/demonstration and/or collaborative repertoire. All students majoring in music are required to attend in a minimum of 100 approved recitals/concerts prior to graduation. During the 4th year in an undergraduate degree program and upon completion of this requirement, students should register for MUSI 388, 0 cr.

MUSI 356	Form & Analysis I	2
MUSI 357	Form & Analysis II	2
MUSI 388	Concert Attendance UM	0
MUSI 492	Independent Study	2
MUSI 495	Applied Study IV (4 credits each semester)	8
MUSI 499	Senior Recital/Capstone Pjt	2
Total Hours		16

Minimum Required Grade: C-

1st and 2nd year Ensemble Requirements

Rule: One course each semester

Note: Ensembles one credit each semester for a total of two credits each year. All majors seeking an undergraduate degree in music and who are registered for 5 or more credits must participate in an ensemble specified by their degree curriculum each semester of residence of the regular school year. (See specific curricula for maximum ensemble credits applicable toward minimum degree requirements.)

MUSI 108A	Orchestra: UMSO	1
MUSI 110A	Opera Theatre I	1
MUSI 112A	Choir	1
MUSI 114A	Band: UM Concert Band	1
MUSI 162A	Chamber Ensembles I	1
MUSI 191	Special / Experimental Courses	1-9
Total Hours		6-14

Minimum Required Grade: C-

Ensembles 3rd year

Rule: One course each semester

Note: 2nd year ensembles one credit each semester for a total of two credits each year. All majors seeking an undergraduate degree in music and who are registered for 5 or more credits must participate in an ensemble specified by their degree curriculum each semester of residence of the regular school year. (See specific curricula for maximum ensemble credits applicable toward minimum degree requirements.)

MUSI 308	Orchestras II: UM	1
MUSI 310	Opera Theatre II	1
MUSI 312	Choir III	1-8
MUSI 314	Band III: UM Concert Band	1
MUSI 362	Chmbr Ens III: UM	1
Total Hours		5-12

Minimum Required Grade: C-

4th year Ensemble Requirements

Rule: One course each semester

Note: 4th year ensembles one credit each semester for a total of two credits each year. All majors seeking an undergraduate degree in music and who are registered for 5 or more credits must participate in an ensemble specified by their degree curriculum each semester of residence of the regular school year. (See specific curricula for maximum ensemble credits applicable toward minimum degree requirements.)

MUSI 308	Orchestras II: UM	1
MUSI 310	Opera Theatre II	1
MUSI 312	Choir III	1-8
MUSI 314	Band III: UM Concert Band	1
MUSI 362	Chmbr Ens III: UM	1
Total Hours		5-12

Minimum Required Grade: C-

Lower Division Writing Expectation

Rule: All courses required

MUSI 302H	Music History II	3
Total Hours		3

Minimum Required Grade: C-

Upper Division Writing Expectation

Rule: One course for 3 credits

Note: Must take one of the courses above for 3 credits.

Select one of the following:		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-

Music Requirements for Writing

Rule: All courses required

WRIT 101	College Writing I	3
Total Hours		3

Minimum Required Grade: C-

Music Requirements for Mathematics

Rule: One course for 3 credits

Note: Mathematics - M 105 or M 115

M 105	Contemporary Mathematics	3
or M 115	Probability and Linear Mathematics	
Total Hours		3

Minimum Required Grade: C-

Music Requirements for Modern & Classical Languages

Rule: All courses required

Note: Foreign Language - French or German for 10 credits.

Minimum Required Grade: C-

10 Total Credits Required

Music Requirements for Expressive Arts

Rule: All courses required

Note: Expressive Arts - A Courses - (min. 3 credits) Ensembles and Sec. Lessons taken each semester satisfies this requirement.

Minimum Required Grade: C-

3 Total Credits Required

Music Requirements for Literary & Artistic Studies

Rule: All courses required

Note: Literary and Artistic Studies - L Courses - (min. 3 credits) MUSI 202L taken in 1st year satisfies this requirement.

MUSI 202L	Intro to Music Literature	3
Total Hours		3

Minimum Required Grade: C-

Music Requirements for Historic & Cultural Studies

Rule: All courses required

Select one or both of the following: 3-6

MUSI 301H	Music History I	
MUSI 302H	Music History II	
Total Hours		3-6

Total Hours 3-6

Minimum Required Grade: C-

Music Requirements for Indigenous & Global Perspectives

Rule: All courses required

Note: Indigenous and Global Perspectives - (min. 3 credits) Required MUSI 207H

MUSI 207H	World Music (equiv to 307) (equiv to 307)	3
Total Hours		3

Minimum Required Grade: C-

Music Requirements for Natural Sciences

Rule: All courses required

Note: Natural Science (for this perspective, 6 credits required and at least one course Must include a lab experience)

Minimum Required Grade: C-

6 Total Credits Required

This is an advising track only and not an official program as recognized by the University of Montana (UM) or the Montana University System. This information will not appear on your UM transcript, diploma, university lists, student data system, or university publication. You do not fill out a major change for a track.

Piano Performance

Bachelor of Music - Music; Track: Specialization in Piano Performance

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College of Visual & Perf Arts

Degree Specific Credits: 87

Required Cumulative GPA: 2.75

Catalog Year: 2017-2018

Note: All degrees require 39 upper division credits.

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

1st year	15
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Music Requirements for Writing	3
Lower Division Writing Expectation	3
Music Requirements for Mathematics	3
Music Requirements for Expressive Arts	3
Music Requirements for Literary & Artistic Studies	3
Music Requirements for Historic & Cultural Studies	3
Music Requirements for Indigenous & Global Perspectives	3
Music Requirements for Natural Sciences	6
Total Hours	116-135

1st year

Rule: All courses required

Note: 1st year required: MUSI 195 2 credits each semester for a total of 4 credits first year.

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 credits each semester)	4
MUSI 202L	Intro to Music Literature	3
Total Hours		15

Minimum Required Grade: C-

2nd year

Rule: All courses required

Note: 2nd year required:

- MUSI 295 3 credit each semester for a total of 6 credits first year.
- MUSI 102A is required for 1 credit each semester of the second year for a total of 2 credits.
- MUSI 296 Upper-Division Required Performance required to be completed to advance to upper division classes.

MUSI 102A	Performance Study (1 credit each semester)	2
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 295	Applied Study II (3 credits each semester)	6
MUSI 296	Piano Prof Assessment	0
MUSI 301H	Music History I	3

MUSI 302H	Music History II	3
Total Hours		22

Minimum Required Grade: C-

3rd year

Rule: All courses required

Note: 3rd year required:

- MUSI 395 4 credits each semester for a total of 8 credits third year.
- MUSI 335 or MUSI 336 for 2 credits.
- Piano principles must take MUSI 332 or MUSI 218 with PPA (at the discretion of Piano Faculty)

MUSI 332	Advanced Functional Piano (piano principles must take or MUSI 218 with PPA)	1
MUSI 333	Practicum in Piano Pedagogy	1-2
MUSI 335	Instrumental Conducting	2
or MUSI 336	Choral Conducting	
MUSI 356	Form & Analysis I	2
MUSI 357	Form & Analysis II	2
MUSI 395	Applied Study III (4 credits each semester)	8
MUSI 435	Piano Methods & Materials I	3
MUSI 436	Piano Methods & Materials II	3
Upper-Division Course		2
Total Hours		24-25

Minimum Required Grade: C-

4th year

Rule: All courses required

Note: 4th year required:

- MUSI 495 4 credits each semester for a total of 8 credits fourth year.
- MUSI 499 for two credits.
- MUSI 415, MUSI 416 or MUSI 417 Upper Division Writing Course for 3 credits,
- additional 2 credits upper division.

All students majoring in music are required to attend in a minimum of 100 approved recitals/concerts prior to graduation. During the 4th year in an undergraduate degree program and upon completion of this requirement, students should register for MUSI 388, 0 cr.

MUSI 388	Concert Attendance UM	0
Select one of the following:		3
MUSI 415	Music 20th Century to Present	
MUSI 416	Topics in Music History	
MUSI 417	Cultural Studies in Music	
MUSI 432	Keyboard Literature	3
MUSI 433	Keyboard Literature II	3
MUSI 495	Applied Study IV (4 credits each semester)	8
MUSI 499	Senior Recital/Capstone Pjt	2

Upper Division Course	2
Total Hours	21

Minimum Required Grade: C-

Upper Division Writing Expectation

Rule: One course for 3 credits

Select one of the following:	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-

1st and 2nd year Ensemble Requirements

Rule: One course each semester

All majors seeking an undergraduate degree in music and who are registered for 5 or more credits must participate in an ensemble specified by their degree curriculum each semester of residence of the regular school year. (See specific curricula for maximum ensemble credits applicable toward minimum degree requirements.)

MUSI 108A Orchestra: UMSO	1
MUSI 112A Choir	1
MUSI 114A Band: UM Concert Band	1
MUSI 162A Chamber Ensembles I	1
MUSI 191 Special / Experimental Courses (piano principals only)	1-9
Total Hours	5-13

Minimum Required Grade: C-

3rd and 4th year Ensemble Requirements

Rule: One course each semesterAll 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.)

MUSI 308 Orchestras II: UM	1
MUSI 362 Chmbr Ens III: UM	1
MUSI 391 Special / Experimental Courses (piano principals only)	1-9
Total Hours	3-11

Minimum Required Grade: C-

Music Requirements for Writing

WRIT 101 College Writing I	3
Total Hours	3

Lower Division Writing Expectation

Rule: All courses required

MUSI 302H Music History II	3
Total Hours	3

Minimum Required Grade: C-

Music Requirements for Mathematics

Rule: Three credits required

Note: Mathematics - M Course 100 or above

Minimum Required Grade: C-

3 Total Credits Required

Music Requirements for Expressive Arts

Rule: See Commentary

Note: Expressive Arts - A Courses - (min. 3 credits) Ensembles and Sec. Lessons taken each semester satisfies this requirement.

Minimum Required Grade: C-

Music Requirements for Literary & Artistic Studies

Rule: See Commentary

Note: Literary and Artistic Studies - L Courses - (min. 3 credits) MUSI 202L taken in 1st year satisfies this requirement.

Minimum Required Grade: C-

Music Requirements for Historic & Cultural Studies

Minimum Required Grade: C-

3 Total Credits Required

Music Requirements for Indigenous & Global Perspectives

Rule: All courses required

Note: Indigenous and Global Perspectives - (min. 3 credits) Required MUSI 207H

MUSI 207H World Music (equiv to 307)	3
Total Hours	3

Minimum Required Grade: C-

Music Requirements for Natural Sciences

Rule: All courses required

Note: Natural Science (for this perspective, 6 credits required and at least one course Must include a lab experience)

Minimum Required Grade: C-

6 Total Credits Required

This is an advising track only and not an official program as recognized by the University of Montana (UM) or the Montana University System. This information will not appear on your UM transcript, diploma, university lists, student data system, or university publication. You do not fill out a major change for a track.

Piano Performance and Pedagogy

Bachelor of Music - Music; Track: Specialization in Piano Performance & Pedagogy

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College of Visual & Perf Arts

Degree Specific Credits: 85

Required Cumulative GPA: 2.75

Catalog Year: 2017-2018

Note: All Degrees Require 39 Upper-Division Credits.

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umat.edu/academics/general-education-requirements>) of the catalog.

Summary

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Upper Division Writing Expectation	3
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1st and 2nd year Ensemble Requirements	5-13
3rd and 4th year Ensemble Requirements	3
Music Electives Required	10
Music Requirements for Writing	3
Music Requirements for Mathematics	3
Music Requirements for Expressive Arts	3
Music Requirements for Literary & Artistic Studies	3
Music Requirements for Historic & Cultural Studies	3
Music Requirements for Indigenous & Global Perspectives	3
Music Requirements for Natural Sciences	6
Total Hours	122-130

1st year

Rule: All courses required

Note: Required 1st year: MUSI 195 2 credits each semester for a total of 4 credits first year.

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 credits each semester)	4
MUSI 202L	Intro to Music Literature	3
Total Hours		15

Minimum Required Grade: C-

2nd year

Rule: All courses required

Note: 2nd year required:

- MUSI 102A one credit each semester for a total of two credits.
- MUSI 295 2 credits each semester for a total of 4 credits second year.
- Electives and General Education (should include PSYX 100S) for a total of 8 credits.
- MUSI 296 Upper-Division Required Performance required to move on to upper division classes.

MUSI 102A	Performance Study (one credit each semester)	2
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 295	Applied Study II (2 credits each semester)	4
MUSI 296	Piano Prof Assessment	0
MUSI 301H	Music History I	3
MUSI 302H	Music History II	3
Total Hours		20

Minimum Required Grade: C-

3rd year

Rule: All courses required

Note: Required 3rd year:

- MUSI 395 3 credit each semester for a total of 6 credits third year.
- MUSI 333 1 credit each semester for a total of two credits third year.
- MUSI 335 or MUSI 336 for 2 credits.

MUSI 332	Advanced Functional Piano	1
MUSI 333	Practicum in Piano Pedagogy (one credit per semester)	2
MUSI 335	Instrumental Conducting	2
or MUSI 336	Choral Conducting	
MUSI 356	Form & Analysis I	2
MUSI 357	Form & Analysis II	2
MUSI 395	Applied Study III (3 credits each semester)	6
MUSI 435	Piano Methods & Materials I	3

MUSI 436	Piano Methods & Materials II	3
Total Hours		21

Minimum Required Grade: C-

4th year

Rule: All courses required

Note: Required 4th year:

- MUSI 333 1 credit each semester for a total of 2 credits.
- MUSI 495 3 credit each semester for a total of 6 credits the fourth year.
- MUSI 492 for a total of 2 credits.
- MUSI 499 - 2 credits Spring semester, Senior recital may be two half-recitals. One half recital may include pedagogical lecture/ demonstration and/or collaborative repertoire.

All students majoring in music are required to attend in a minimum of 100 approved recitals/concerts prior to graduation. During the 4th year in an undergraduate degree program and upon completion of this requirement, students should register for MUSI 388, 0 cr.

MUSI 333	Practicum in Piano Pedagogy (one credit each semester)	2
MUSI 388	Concert Attendance UM	0
MUSI 432	Keyboard Literature	3
MUSI 433	Keyboard Literature II	3
MUSI 492	Independent Study	2
MUSI 495	Applied Study IV (3 credits each semester)	6
MUSI 499	Senior Recital/Capstone Pjt (2 credits Spring semester)	2
Total Hours		18

Minimum Required Grade: C-

Upper Division Writing Expectation

Rule: One course for 3 credits

Select one of the following:		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-

Lower Division Writing Expectation

Rule: All courses required

MUSI 302H	Music History II	3
Total Hours		3

Minimum Required Grade: C-

1st and 2nd year Ensemble Requirements

Rule: One course each semester

All majors seeking an undergraduate degree in music and who are registered for 5 or more credits must participate in an ensemble specified by their degree curriculum each semester of residence of the regular school year. (See specific curricula for maximum ensemble credits applicable toward minimum degree requirements.)

MUSI 108A	Orchestra: UMSO	1
MUSI 112A	Choir	1
MUSI 114A	Band: UM Concert Band	1
MUSI 162A	Chamber Ensembles I	1
MUSI 191	Special / Experimental Courses	1-9
Total Hours		5-13

Minimum Required Grade: C-

3rd and 4th year Ensemble Requirements

Rule: One course each semester

MUSI 308	Orchestras II: UM	1
MUSI 314	Band III: UM Concert Band	1
MUSI 362	Chmbr Ens III: UM	1
Total Hours		3

Minimum Required Grade: C-

Music Electives Required

Rule: All courses required

DANC 497	Methods: Tchng Movmnt in Schls	3
PSYX 100S	Intro to Psychology	3
PSYX 230	Developmental Psychology	3
Total Hours		9

Minimum Required Grade: C-

Music Requirements for Writing

Rule: All courses required

WRIT 101	College Writing I	3
Total Hours		3

Minimum Required Grade: C-

Music Requirements for Mathematics

Rule: All courses required

Note: Mathematics - M Course 100 or above for 3 credits

Minimum Required Grade: C-

3 Total Credits Required

Music Requirements for Expressive Arts

Rule: All courses required

Note: Expressive Arts - A Courses - (min. 3 credits) Ensembles and Sec. Lessons taken each semester satisfies this requirement.

Minimum Required Grade: C-

3 Total Credits Required

Music Requirements for Literary & Artistic Studies

Rule: All courses required

Note: Literary and Artistic Studies - L Courses - (min. 3 credits) MUSI 202L taken in 1st year satisfies this requirement.

MUSI 202L	Intro to Music Literature	3
Total Hours		3

Minimum Required Grade: C-

Music Requirements for Historic & Cultural Studies

Rule: One course for 3 credits

MUSI 301H	Music History I	3
	or MUSI 302H Music History II	
Total Hours		3

Minimum Required Grade: C-

Music Requirements for Indigenous & Global Perspectives

Rule: All courses required

Note: Indigenous and Global Perspectives - (min. 3 credits) Required MUSI 207H

MUSI 207H	World Music (equiv to 307)	3
Total Hours		3

Minimum Required Grade: C-

Music Requirements for Natural Sciences

Rule: All courses required

Note: Natural Science (for this perspective, 6 credits required and at least one course Must include a lab experience)

Minimum Required Grade: C-

6 Total Credits Required

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Voice

Bachelor of Music - Music; Track: Specialization In Voice

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College of Visual & Perf Arts

Degree Specific Credits: 84

Required Cumulative GPA: 2.75

Catalog Year: 2017-2018

Note: All degrees require 39 upper division credits.

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

1st year	23
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3rd year	15
4th year	17
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Music Requirements	3
Ensembles 3rd and 4th year	3-10
Lower Division Writing Expectation	3
Music Requirements for Writing	3
Music Requirements for Mathematics	3
Music Requirements for Modern & Classical Languages	10
Music Requirements for Expressive Arts	3
Music Requirements for Historic & Cultural Studies	3
Music Requirements for Indigenous & Global Perspectives	3
Music Requirements for Natural Sciences	6
Total Hours	120-127

1st year

Rule: All courses required

Note: Required 1st year:

- MUSI 195 2 credits each semester for a total of 4 credits first year.
- MUSI 112A section 01-02 Ensembles 1 credit each semester for a total of 2 credits this year.

MUSI 105	Music Theory I	2
MUSI 106	Music Theory II	2
MUSI 112A	Choir (one credit each semester)	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 195	Applied Study I (2 credits each semester)	4

MUSI 202L	Intro to Music Literature	3
MUSI 281	Diction: English, Italian	2
MUSI 282	Dict: Gmn & French (equiv 382) (equiv to 382)	2
Total Hours		23

Minimum Required Grade: C-

2nd year

Rule: All courses required

Note:

- 2nd year Ensembles any of the MUSI 112A section 01, 02. - 1 credit each semester for a total of two credits this year.
- MUSI 295 2 credits each semester for a total of 4 credits 2nd year
- MUSI 296 Upper-Division Required Performance required to move on to upper division classes.

MUSI 112A	Choir (one credit each semester)	2
MUSI 205	Music Theory III	2
MUSI 206	Music Theory IV	2
MUSI 235	Keyboard Skills III	1
MUSI 236	Keyboard Skills IV	1
MUSI 240	Aural Perception III	2
MUSI 241	Aural Perception IV	2
MUSI 295	Applied Study II (2 credits each semester)	4
MUSI 296	Piano Prof Assessment	0
MUSI 301H	Music History I	3
MUSI 302H	Music History II	3
Total Hours		22

Minimum Required Grade: C-

3rd year

Rule: All courses required

Note: Required 3rd year.

- MUSI 395 2 credit each semester for a total of 4 credits,
- MUSI 110A 1 credit each semester for a total of 2 credits the 3rd year.
- Upper Division Music Electives should include MUSI 415, MUSI 416, MUSI 417 two credits Fall semester and one credit Spring semester.

MUSI 310	Opera Theatre II (one credit each semester)	2
MUSI 336	Choral Conducting	2
MUSI 356	Form & Analysis I	2
MUSI 357	Form & Analysis II	2
MUSI 395	Applied Study III (2 credits each semester)	4
Select two credits Fall semester and one credit Spring semester from the following:		3
MUSI 415	Music 20th Century to Present	
MUSI 416	Topics in Music History	
MUSI 417	Cultural Studies in Music	
Total Hours		15

Minimum Required Grade: C-

4th year

Rule: All courses required

Note: Required 4th year.

- MUSI 495 2 credit each semester for a total of 4 credits the fourth year.
- MUSI 499 2 credits Spring semester.
- Upper Division Music Electives should include MUSI 415, MUSI 416, MUSI 417 for 3 credits and
- 2 credits upper division electives.

All students majoring in music are required to attend in a minimum of 100 approved recitals/concerts prior to graduation. During the 4th year in an undergraduate degree program and upon completion of this requirement, students should register for MUSI 388, 0 cr.

MUSI 342	Vocal Repertoire I	2
MUSI 343	Vocal Repertoire II	2
MUSI 388	Concert Attendance UM	0
Select one of the following:		3
MUSI 415	Music 20th Century to Present	
MUSI 416	Topics in Music History	
MUSI 417	Cultural Studies in Music	
MUSI 442	Vocal Studio Pedagogy and Lit	2
MUSI 495	Applied Study IV (2 credits each semester)	4
MUSI 499	Senior Recital/Capstone Pjt (2 credits Spring semester)	2
Upper Division Electives		2
Total Hours		17

Minimum Required Grade: C-

Upper Division Writing Expectation

Rule: 3 credits required of one of the courses below

Select one of the following:		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-

Music Requirements

Rule: All courses required

THTR 120A	Introduction to Acting I	3
Total Hours		3

Minimum Required Grade: C-

Ensembles 3rd and 4th year

Section 1, University Choir:

MUSI 312	Choir III	1-8
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Section 2, Chamber Chorale:

MUSI 312	Choir III	1-8
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Section 3, Women's Chorus

MUSI 312	Choir III	1-8
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Opera Theater:

MUSI 310	Opera Theatre II	1-8
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Total Hours		4-32
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MUSI 310	Opera Theatre II	1
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MUSI 312	Choir III	1-8
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MUSI 362	Chmbr Ens III: UM	1
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Total Hours		3-10
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Minimum Required Grade: C-

Lower Division Writing Expectation

Rule: All courses required

MUSI 302H	Music History II	3
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Total Hours		3
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Minimum Required Grade: C-

Music Requirements for Writing

Rule: All courses required

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

Music Requirements for Mathematics

Rule: All courses required

Note: Mathematics - M Course 100 or above

Minimum Required Grade: C-

3 Total Credits Required

Music Requirements for Modern & Classical Languages

Rule: All courses required

Note: Foreign Language French, Italian or German, I & II for 5 credits each semester for a total of 10 credits

Minimum Required Grade: C-

10 Total Credits Required

Music Requirements for Expressive Arts

Rule: All courses required

Note: Expressive Arts - A Courses - (min. 3 credits) Ensembles and Sec. Lessons taken each semester satisfies this requirement.

Minimum Required Grade: C-

3 Total Credits Required

Music Requirements for Literary & Artistic Studies

Rule: All courses required

Note: Literary and Artistic Studies - L Courses - (min. 3 credits) MUSI 202L taken in 1st year satisfies this requirement.

Minimum Required Grade: C-

3 Total Credits Required

Music Requirements for Historic & Cultural Studies

Rule: All courses required

Minimum Required Grade: C-

3 Total Credits Required

Music Requirements for Indigenous & Global Perspectives

Rule: All courses required

Note: Indigenous and Global Perspectives - (min. 3 credits) Required MUSI 207H

Minimum Required Grade: C-

3 Total Credits Required

Music Requirements for Natural Sciences

Rule: All courses required

Note: Natural Science (for this perspective, 6 credits required and at least one course Must include a lab experience)

Minimum Required Grade: C-

6 Total Credits Required

This is an advising track only and not an official program as recognized by the University of Montana (UM) or the Montana University System.

This information will not appear on your UM transcript, diploma, university lists, student data system, or university publication. You do not fill out a major change for a track.

Theatre & Dance

Michael Monsos, Director

The School of Theatre & Dance is accredited by the National Association of Schools of Theatre (NAST) and is a member of the Association for Theatre in Higher Education (ATHE) and the United States Institute for Theatre Technology (USITT). The school is housed in the Performing Arts and Radio/Television Center, which includes three theatre/dance performance spaces. 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, 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, or Directing.

For more information on the academic programs and to learn about Theatre & Dance productions, please visit our website (<http://www.umt.edu/umarts/theatredance>).

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 Handbook.

Undergraduate

- Dance B.A. (p. 437)
- Dance B.F.A. (p. 438)
- Theatre B.A. (p. 442)
- Theatre B.F.A. (p. 444)

Undergraduate Minors

- Dance (p. 441)
- Dance Specialization Education (p. 441)
- Theatre (p. 447)
- Theatre Education (p. 447)

Dance B.A.

Bachelor of Arts - Dance

College of Visual & Perf Arts

Degree Specific Credits: 51

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Note: There is an Admission Audition which prospective majors must pass during the first year to continue in the program. All students must take DANC 194 prior to auditioning for the major.

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

BA Dance Major LD Core	24
Required Courses	
Costuming Experience	
Ballet Experience I	
Jazz Experience I	
BA Dance Major UD Core	20-21
Required Courses	
Modern Experience I	
Junior Project	
Senior Project	
BA Dance Major Electives	7-12
Technique Experience II	
Elective Courses	
Total Hours	51-57

BA Dance Major LD Core

Rule: Must complete the following subcategories.

24 Total Credits Required

Required Courses

Rule: All courses are required.

DANC 165A	Dance Forms: African	2
DANC 200A	Contemporary Modern II	2
DANC 220A	Creative Practice I	3
THTR 102A	Introduction to Theatre Design	3

THTR 106A	Theat Prod I: Run Crew	1
Total Hours		11

Minimum Required Grade: C-

Costuming Experience

Rule: Select 1 of the 2 options.

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.

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

Minimum Required Grade: C-

Ballet Experience I

Rule: 6 credits required at or above the listed level.

DANC 110A	Introduction to Ballet	2
Total Hours		2

Minimum Required Grade: C-

Jazz Experience I

Rule: 4 credits required at or above the listed level.

DANC 115A	Introduction to Jazz Dance	2
Total Hours		2

Minimum Required Grade: C-

BA Dance Major UD Core

Rule: Must complete the following subcategories.

20 Total Credits Required

Required Courses

Rule: All courses are required.

DANC 305	Contact Improvisation	2
DANC 334	Dance History	3
DANC 494	Junior/Senior Seminar	3
Total Hours		8

Minimum Required Grade: C-

Modern Experience I

Rule: 9 credits required at or above the listed level.

DANC 300	Contemporary Modern III	3
Total Hours		3

Minimum Required Grade: C-

Junior Project

Rule: Students must complete project for graduation.

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

DANC 399	Jr Creat/Research Proj	1
Total Hours		1

Minimum Required Grade: C-

Senior Project

Rule: Students must complete project for graduation.

DANC 499	Senior Thesis/Creative Project	2-3
Total Hours		2-3

Minimum Required Grade: C-

BA Dance Major Electives

Rule: Must complete the following subcategories.

Minimum Required Grade: C-

6 Total Credits Required

Technique Experience II

Rule: 4 or 6 credits required at or above the listed level.

Note: Select 1 of the 3 options.

Select 4-6 credits from the following:		4-6
DANC 215A	Jazz Dance II	
DANC 300	Contemporary Modern III	
DANC 310	Ballet III	
Total Hours		4-6

Minimum Required Grade: C-

Elective Courses

Rule: 3-6 credits required.

Note: Select 2 of the 8 options.

Select two of the following:		3-6
DANC 295	Student Teaching: Children's 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 220A	Acting I	
Total Hours		3-6

Minimum Required Grade: C-

Dance B.F.A.

Bachelor of Fine Arts - Dance

College of Visual & Perf Arts

Degree Specific Credits: 70-74

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

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 which prospective majors must pass during the first year to continue in the program. All students must take DANC 194 prior to auditioning for the major.

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

BFA Dance Major LD Core	8
Required Courses	
Costuming Experience	
BFA Dance Major UD Core	36
Required Courses	
Ballet Experience	
Stage Management Course	
Junior Project	
Senior Project	
<hr/> Total Hours	<hr/> 44

BFA Dance Major LD Core

Rule: Must complete the following subcategories.

8 Total Credits Required

Required Courses

Rule: All courses are required.

DANC 220A	Creative Practice I	3
DANC 295	Student Teaching: Children's Dance	1
THTR 106A	Theat Prod I: Run Crew	1
<hr/> Total Hours		<hr/> 5

Minimum Required Grade: C-

Costuming Experience

Rule: Select 1 of the 2 options.

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

THTR 107A	Theat Prod I: Constr Crew (either Section 02 or 05)	3
or THTR 245	Int Costume Construction	
<hr/> Total Hours		<hr/> 3

Minimum Required Grade: C-

BFA Dance Major UD Core

Rule: Must complete the following subcategories.

36 Total Credits Required

Required Courses

Rule: All courses are required.

DANC 305	Contact Improvisation	2
DANC 334	Dance History	3
DANC 360L	World Dance	3
DANC 380	Science of Dance Movement	3
DANC 406	Dance as a Healing Art	2
DANC 440	Dance Pedagogy	3
DANC 494	Junior/Senior Seminar	3
<hr/> Total Hours		<hr/> 19

Minimum Required Grade: C-

Ballet Experience

Rule: 12 credits required at or above the listed level.

DANC 310	Ballet III	2
<hr/> Total Hours		<hr/> 2

Minimum Required Grade: C-

Stage Management Course

Rule: Registration based on production assignment as determined by Dance faculty.

DANC 329	Dance Stage Management Practicum	1
<hr/> Total Hours		<hr/> 1

Minimum Required Grade: C-

Junior Project

Rule: Students must complete project for graduation.

Note: Junior projects must be planned with the student's project advisor and all journals and papers will be submitted to that advisor. All choreography and performance BFA candidates are required to choreograph for their junior projects.

DANC 399	Jr Creat/Research Proj	1
<hr/> Total Hours		<hr/> 1

Minimum Required Grade: C-

Senior Project

Rule: Students must complete project for graduation.

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

DANC 499	Senior Thesis/Creative Project	3
<hr/> Total Hours		<hr/> 3

Minimum Required Grade: C-

Choreography & Performance Track

BFA Choreography & Performance Degree Electives

Rule: Must complete the follow subcategories.

1 Total Credits Required

Cross-Training

Rule: One credit from HHP by advisement.

Acting Elective

Rule: Optional by advisement.

THTR 220A	Acting I	3
Total Hours		3

Minimum Required Grade: Pass

BFA Choreography & Performance Requirements

Rule: Must complete the following subcategories.

25 Total Credits Required

Required Courses

Rule: All courses are required.

DANC 280	Dance Conditioning: Pilates	1
DANC 320	Creative Practice II	2
DANC 405	Advanced Improvisation	2
Total Hours		5

Minimum Required Grade: C-

Production Courses

Rule: Registration and credit load based on casting for Theatre & Dance productions.

Note: Performing in one piece equals one credit.

2 credits required	2	
DANC 225	Rehearsal & Performance	2
Total Hours		2

Minimum Required Grade: C-

Modern Experience I

Must be taken twice for a total of 6 credits 6

DANC 300	Contemporary Modern III	6
Total Hours		6

Minimum Required Grade: C-

Modern Experience II

Must be taken twice for a total of 6 credits 6

DANC 400	Contemporary Modern IV	6
Total Hours		6

Minimum Required Grade: C-

Modern Experience III

Rule: Repeat once.

Must be taken twice for a total of 6 credits 6

DANC 400	Contemporary Modern IV	6
Total Hours		6

Minimum Required Grade: C-

This is an advising track only and not an official program as recognized by the University of Montana (UM) or the Montana University System. This information will not appear on your UM transcript, diploma, university lists, student data system, or university publication. You do not fill out a major change for a track.

Teaching Track

BFA Teaching Requirements

Rule: Must complete the following subcategories.

30 Total Credits Required

Required Courses

Rule: All courses are required.

Note: For DANC 440: Section 40

DANC 345	Teaching for the Disabled	1
DANC 440	Dance Pedagogy (Section 40)	3
Total Hours		4

Minimum Required Grade: C-

Teaching Assistant Experience

Rule: Course required.

Note: Completion of **two credits** must include serving as teaching assistant for at least one 100-level technique course offered in DANC rubric on campus. It is optional to earn credits through the Flagship Program.

Complete 2 credits	2	
DANC 446	Teaching Projects	2
Total Hours		2

Minimum Required Grade: C-

In-Schools Experience

Note: Section 01 for first registration; Section 40 for second.

Must be taken twice for a total of 6 credits	6	
DANC 497	Methods: Tchng Movmnt in Schls (Section 01 and Section 40)	6
Total Hours		6

Minimum Required Grade: C-

Modern Experience

Total of 18 credits required at or above the listed level 18

DANC 300	Contemporary Modern III	18
Total Hours		18

Minimum Required Grade: C-

This is an advising track only and not an official program as recognized by the University of Montana (UM) or the Montana University System.

This information will not appear on your UM transcript, diploma, university lists, student data system, or university publication. You do not fill out a major change for a track.

Dance Education Minor

Minor - Dance Specialization Education (Minor)

College of Visual & Perf Arts

Degree Specific Credits: 21

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Summary

Dance Education Minor LD Core	5
Composition	
Student Teaching Experience	
Dance Education Minor UD Core	14-15
Required Courses	
In-Schools Experience	
Technique Experience I	
Technique Experience II	2
Dance Minor Electives (Optional)	6
Total Hours	27-28

Dance Education Minor LD Core

Rule: Must complete the following subcategories.

5 Total Credits Required

Composition

Rule: Course required.

DANC 220A	Creative Practice I	3
Total Hours		3

Minimum Required Grade: C-

Student Teaching Experience

Must take twice for a total of 2 credits 2

DANC 295	Student Teaching: Children?s Dance	
Total Hours		2

Minimum Required Grade: C-

Dance Education Minor UD Core

Rule: Must complete the following subcategories.

14 Total Credits Required

Required Courses

Rule: All courses are required

DANC 360L	World Dance	3
DANC 440	Dance Pedagogy	3
Total Hours		6

Minimum Required Grade: C-

In-Schools Experience

Note: Section 01 for first registration; Section 40 for second.

Must take twice for a total of 6 credits 6

DANC 497	Methods: Tchng Movmnt in Schls (Section 01 and Section 40)	
Total Hours		6

Minimum Required Grade: C-

Technique Experience I

Rule: Choose 1 of the 2 options.

DANC 300	Contemporary Modern III	2-3
or DANC 310	Ballet III	
Total Hours		2-3

Minimum Required Grade: C-

Technique Experience II

Rule: Select at least 1 of the 3 options as listed below or other Social, Cultural/World, or Traditional/Indigenous technique course by advisement.

DANC 160A	Dance Forms: Irish	2
DANC 165A	Dance Forms: African	2
DANC 315	Jazz III	2

Minimum Required Grade: C-

Dance Education Minor Electives

Rule: Optional; by advisement.

DANC 334	Dance History	3
DANC 380	Science of Dance Movement	3
Total Hours		6

Minimum Required Grade: Pass

Dance Minor

Minor - Dance (Minor)

College of Visual & Perf Arts

Degree Specific Credits: 27

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Summary

Dance Minor LD Core	22
Composition	

Modern Experience I	
Ballet Experience I	
Jazz Experience	
Technique Experience II	
Costume Experience	
Dance Minor UD Core	3
Dance Minor Electives	2-6
Total Hours	27-31

Dance Minor LD Core

Rule: Must complete the following subcategories

22 Total Credits Required

Composition

Rule: Course is required.

DANC 220A	Creative Practice I	3
Total Hours		3

Minimum Required Grade: C-

Modern Experience I

Must take a total of 6 credits at or above the listed level 6

DANC 100A	Introduction to Modern Dance	
Total Hours		6

Minimum Required Grade: C-

Ballet Experience I

Must take a total of 6 credits at or above the listed level 6

DANC 110A	Introduction to Ballet	
Total Hours		6

Minimum Required Grade: C-

Jazz Experience

Rule: 2 credits required at or above the listed level.

DANC 115A	Introduction to Jazz Dance	2
Total Hours		2

Minimum Required Grade: C-

Technique Experience II

Rule: 2 credits required at or above the listed level.

Note: Select 1 of the 4 options.

Select one of the following:		2
DANC 165A	Dance Forms: African	
DANC 200A	Contemporary Modern II	
DANC 210A	Ballet II	
DANC 215A	Jazz Dance II	
Total Hours		2

Minimum Required Grade: C-

Costume Experience

Rule: Select 1 of the 3 options.

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

Select one of the following:		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

Minimum Required Grade: C-

Dance Minor UD Core

Rule: All courses required.

Note: 3 Total Credits Required.

DANC 334	Dance History	3
Total Hours		3

Minimum Required Grade: C-

Dance Minor Electives

Rule: Select 2 of the 6 options.

2 Total Credits Required

Select two of the following:		2-6
DANC 280	Dance Conditioning: Pilates	
DANC 295	Student Teaching: Children's 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

Minimum Required Grade: C-

Theatre B.A. Bachelor of Arts - Theatre

College of Visual & Perf Arts

Degree Specific Credits: 43

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

BA Theatre Major LD Core	21
Required Courses	
Shop Experience I	
Shop Experience II	
BA Theatre Major UD Core	10
Required Courses	
Senior Project	
BA Theatre Major Focused Area (acting, costumes, literature/ history, scenery, etc.)	12
Total Hours	43

BA Theatre Major LD Core

Rule: Must complete the following subcategories.

21 Total Credits Required

Required Courses

Rule: All courses are required.

THTR 102A	Introduction to Theatre Design	3
THTR 103	Introd to House Management	1
THTR 106A	Theat Prod I: Run Crew	1
THTR 202	Stagecraft I	3
THTR 206	Theat Prod II: Run Crew	1
THTR 220A	Acting I	3
THTR 235L	Dramatic Literature	3
Total Hours		15

Minimum Required Grade: C-

Shop Experience I

Rule: Select 1 of 6 different sections.

Note:

- Section 01: Scene Shop on MW;
- Section 02: Costume Shop on MW;
- Section 03: Light Shop on MW;
- Section 04: Scene Shop on TR;
- Section 05: Costume Shop on TR;
- Section 06: Light Shop on TR.

THTR 107A	Theat Prod I: Constr Crew	3
Total Hours		3

Minimum Required Grade: C-

Shop Experience II

Rule: Select 1 of 6 different sections. Should be a different shop than the one taken for THTR 107A.

Note:

- Section 01: Scene Shop on MW;
- Section 02: Costume Shop on MW;
- Section 03: Light Shop on MW;
- Section 04: Scene Shop on TR;

- Section 05: Costume Shop on TR;
- Section 06: Light Shop on TR.

THTR 207	Theat Prod II: Constr Crew	3
Total Hours		3

Minimum Required Grade: C-

BA Theatre Major UD Core

Rule: Must complete the following subcategories.

10 Total Credits Required

Required Courses

Rule: All courses are required.

THTR 330H	Theatre History I	3
THTR 331Y	Theatre History II	3
THTR 375	Directing I	3
Total Hours		9

Minimum Required Grade: C-

Senior Project

Rule: Must be taken during student's final semester.

THTR 499	Senior Project (take during final semester)	1
Total Hours		1

Minimum Required Grade: C-

BA Theatre Major Focused Area (acting, costumes, literature/history, scenery, etc.)

Rule: Minimum of 12 credits required.

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

Minimum Required Grade: C-

12 Total Credits Required

Education Endorsement Preparation Track

Individuals interested in teaching in K-12 schools must complete a degree in the content area they want to teach plus the teacher preparation program through the Department of Teaching and Learning. Individuals must complete the teaching major/teaching track within that degree program, which may contain different course requirements than the academic major since the sequence of courses is designed to meet state standards. Upon completion of the degree program with the teaching track and the secondary licensure program, one will be eligible for a standard Montana teaching license in this content area.

- Secondary Education Licensure Program (<http://www.coehs.umt.edu/departments/currinst/undergradprograms/seced/default.php>)
- Licensure Degree Requirements (p. 101)

To sign up for this option, you need to contact the Department of Teaching and Learning. Do not fill out a major/minor form for graduation

or the major/minor/concentration section of the major change form. Approvals for this option must come from the Department of Teaching and Learning.

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.

Note: The Education Endorsement Preparation specialization is designed for the student seeking an endorsement in the major teaching field of Theatre. For endorsement to teach Theatre, a student also must be formally admitted to the Teacher Education Program and complete all of the professional education licensure requirements. See the Department of Teaching and Learning (p. 95) in the College of Education and Human Sciences for more information. A major or minor GPA of 2.75 is required to be eligible for student teaching. This major does not qualify as a single field endorsement. Individuals must complete a second teaching major or minor in another content area. The demand in Montana high schools for teaching of courses in this field is limited. The required second endorsement (either a teaching major or teaching minor) should be in a field in high demand.

BA Theatre Education Major LD Core

Rule: Must complete the following subcategories.

24 Total Credits Required

Required Courses

Rule: All courses are required.

THTR 102A	Introduction to Theatre Design	3
THTR 103	Intro to House Management	1
THTR 106A	Theat Prod I: Run Crew	1
THTR 202	Stagecraft I	3
THTR 206	Theat Prod II: Run Crew	1
THTR 210	Voice & Speech I	3
THTR 220A	Acting I	3
THTR 221	Acting II	3
THTR 235L	Dramatic Literature	3
Total Hours		21

Minimum Required Grade: C-

Shop Experience

Rule: Select 1 of 6 different sections.

Note:

- Section 01: Scene Shop on MW;
- Section 02: Costume Shop on MW;
- Section 03: Light Shop on MW;
- Section 04: Scene Shop on TR;
- Section 05: Costume Shop on TR;
- Section 06: Light Shop on TR.

THTR 107A	Theat Prod I: Constr Crew	3
Total Hours		3

Minimum Required Grade: C-

BA Theatre Education Major UD Core

Rule: Must complete the following subcategories.

19 Total Credits Required

Required Courses

Rule: All courses are required.

THTR 320	Acting III	3
THTR 330H	Theatre History I	3
THTR 331Y	Theatre History II	3
THTR 370	Stage Management I	2
THTR 375	Directing I	3
THTR 439	Methods of Teaching Theatre	3
Total Hours		17

Minimum Required Grade: C-

Stage Management Experience

Rule: Registration based on production assignment as determined by Design/Technology faculty/staff.

THTR 371	Stage Mgmt Pract I	1-3
Total Hours		1-3

Minimum Required Grade: C-

Senior Project

Rule: Must be taken during student's final semester on campus (not student-teaching semester).

THTR 499	Senior Project (take during final semester)	1
Total Hours		1

Minimum Required Grade: Pass

Theatre B.F.A. Bachelor of Fine Arts College of Visual & Perf Arts

Degree Specific Credits: 78

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Note: Students who intend to pursue the Bachelor of Fine Arts will normally enter the University as Bachelor of Arts students in Theatre.

General Education Requirements

Information regarding these requirements can be found in the General Education Section (<http://catalog.umt.edu/academics/general-education-requirements>) of the catalog.

Summary

BFA Theatre Major LD Core	15
Required Courses	
Shop Experience I	

BFA Theatre Major UD Core	9
Total Hours	24

BFA Theatre Major LD Core

Rule: Must complete the following subcategories.

15 Total Credits Required

Required Courses

Rule: All courses are required.

THTR 103	Intro to House Management	1
THTR 106A	Theat Prod I: Run Crew	1
THTR 202	Stagecraft I	3
THTR 206	Theat Prod II: Run Crew	1
THTR 220A	Acting I	3
THTR 235L	Dramatic Literature	3
Total Hours		12

Minimum Required Grade: C-

Shop Experience I

Rule: Select 1 of 6 different sections.

Note:

- Section 01: Scene Shop on MW;
- Section 02: Costume Shop on MW;
- Section 03: Light Shop on MW;
- Section 04: Scene Shop on TR;
- Section 05: Costume Shop on TR;
- Section 06: Light Shop on TR.

THTR 107A	Theat Prod I: Constr Crew	3
Total Hours		3

Minimum Required Grade: C-

BFA Theatre Major UD Core

Rule: All courses are required.

Note: 9 Total Credits Required.

THTR 330H	Theatre History I	3
THTR 331Y	Theatre History II	3
THTR 375	Directing I	3
Total Hours		9

Minimum Required Grade: C-

Acting Track

Note: Students who intend to pursue the acting specialization will normally enter the University as Bachelor of Arts students in Theatre. They should then declare intent to pursue the BFA degree no later than the beginning of the second year of a four-year program. A student may elect a special concentration in directing, music theatre, or another discipline in addition to the BFA core and area-specialization requirements. The program is designed in consultation with the student's

advisor and must be approved by the faculty. The special concentration may require five years to complete.

BFA Acting Requirements

Rule: Must complete the following subcategories. 54 Total Credits Required.

Required Courses

Rule: All courses are required.

THTR 210	Voice & Speech I	3
THTR 211	Voice & Speech II	3
THTR 221	Acting II	3
THTR 249	Stage Makeup	2
THTR 310	Voice and Speech III	3
THTR 315	Physical Performance Skills I	3
THTR 316	Physical Performance Skills II	3
THTR 320	Acting III	3
THTR 321	Acting IV	3
THTR 415	Physical Performance Skills III	3
THTR 420	Acting V	3
THTR 421	Acting VI	3
THTR 425	Acting VII	3
THTR 481	Adv Acting: Persnl Performance	3
THTR 484	Adv Acting: Professional Skills	3
Total Hours		44

Minimum Required Grade: C-

Senior Project

Rule: Must be taken during student's final semester.

THTR 499	Senior Project (take during final semester)	1
Total Hours		1

Minimum Required Grade: C-

BFA Acting Production Courses

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

Must be taken for a total of 3 credits		3
THTR 395	Practicum	
THTR 495	Practicum	
Total Hours		3

Minimum Required Grade: C-

BFA Acting Performance Electives

Rule: Minimum of 6 credits required.

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

Minimum Required Grade: C-

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.

Design & Technology Track

Note: Students who intend to pursue the design & technology specialization will normally enter the University as Bachelor of Arts students in Theatre. They should then declare intent to pursue the BFA degree no later than the beginning of the second year of a four-year program. Students wishing to pursue a BFA with a specialization in design & technology must:

1. Complete a one-year residency at the UM-Missoula campus which includes a minimum of 12 credits in design & technology.
2. Attain a cumulative 2.5 overall GPA and a 3.0 GPA in design & technology coursework.
3. Present a theatre resume and portfolio consisting of class and production work.
4. Prepare a written statement explaining their educational and professional goals.

BFA Design & Technology Requirements

Rule: Must complete the following subcategories.

54 Total Credits Required.

Required Courses

Rule: All courses are required.

THTR 102A	Introduction to Theatre Design	3
THTR 155	Drawing Fundamntls for Theatre	3
THTR 255	Drafting for Theatre I	3
THTR 370	Stage Management I	2
Total Hours		11

Minimum Required Grade: C-

BFA Design & Technology Shop Experiences

Rule: Must complete the following subcategories.

9 Total Credits Required

Shop Experience II

Rule: Select 1 of 6 different sections from shops not already taken.

Note:

- Section 01: Scene Shop on MW;
- Section 02: Costume Shop on MW;
- Section 03: Light Shop on MW;
- Section 04: Scene Shop on TR;
- Section 05: Costume Shop on TR;
- Section 06: Light Shop on TR.

THTR 107A	Theat Prod I: Constr Crew	3
Total Hours		3

Minimum Required Grade: C-

Shop Experience III

Rule: Select 1 of 6 different sections from shops not already taken.

Note:

- Section 01: Scene Shop on MW;
- Section 02: Costume Shop on MW;
- Section 03: Light Shop on MW;
- Section 04: Scene Shop on TR;
- Section 05: Costume Shop on TR;
- Section 06: Light Shop on TR.

THTR 107A	Theat Prod I: Constr Crew	3
Total Hours		3

Minimum Required Grade: C-

Shop Experience IV

Rule: Select shop in primary area of emphasis after completing Shop Experiences I-III.

THTR 307	Production Construction I	3
Total Hours		3

Minimum Required Grade: C-

BFA Design & Technology UD Drafting Requirement

Rule: Select 1 of the 2 options based on primary area of emphasis.

THTR 345	Flat Pattern Des & Drafting	3
or THTR 355	Computer Aid Draft & Appl	
Total Hours		3

Minimum Required Grade: C-

BFA Design & Technology Junior Project

Rule: Select 1 of the 2 options based on production assignment as determined by Design & Technology faculty/staff.

THTR 308	Production Team I	2
or THTR 309	Production Design I	
Total Hours		2

Minimum Required Grade: C-

BFA Design & Technology Senior Project

Rule: Select 1 of the 2 options based on production assignment as determined by Design & Technology faculty/staff.

THTR 408	Production Team II	3
or THTR 409	Production Design II	
Total Hours		3

Minimum Required Grade: C-

BFA Design & Technology Electives

Rule: Select courses based on primary and secondary areas of interest; minimum of 12 credits must be UD.

26 Total Credits Required

Minimum Required Grade: C-

This is an advising track only and not an official program as recognized by the University of Montana (UM) or the Montana University System. This information will not appear on your UM transcript, diploma, university lists, student data system, or university publication. You do not fill out a major change for a track.

Theatre Education Minor

Minor - Theatre Education (Minor)

College of Visual & Perf Arts

Degree Specific Credits: 21

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Note: Leads to an endorsement in theatre education for those attaining or holding a Montana teaching license (see the Department of Teaching and Learning (p. 95) in the College of Education and Human Sciences for more information). A GPA of 2.75 in the minor is required to be eligible for student teaching.

Summary

Theatre Education Minor LD Core	10
Theatre Education Minor UD Core	11
Total Hours	21

Theatre Education Minor LD Core

Rule: All courses are required.

THTR 106A	Theat Prod I: Run Crew	1
THTR 202	Stagecraft I	3
THTR 220A	Acting I	3
THTR 235L	Dramatic Literature	3
Total Hours		10

Minimum Required Grade: C-

Theatre Education Minor UD Core

Rule: All courses are required.

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

Minimum Required Grade: C-

Theatre Minor

Minor - Theatre (Minor)

College of Visual & Perf Arts

Degree Specific Credits: 22

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Summary

Theatre Minor LD Core	7
Shop Experience	
Introductory/Foundational Experience	
Production Experience	
Theatre Minor Theory/Literature/History Experience	3
Theatre Minor Focused Area (acting, costumes, literature/history, scenery, etc.)	12
Total Hours	22

Theatre Minor LD Core

Rule: Must complete the following subcategories.

Minimum Required Grade: C-

7 Total Credits Required

Shop Experience

Rule: Select 1 of 6 different sections.

Note:

- Section 01: Scene Shop on MW;
- Section 02: Costume Shop on MW;
- Section 03: Light Shop on MW;
- Section 04: Scene Shop on TR;
- Section 05: Costume Shop on TR;
- Section 06: Light Shop on TR.

THTR 107A	Theat Prod I: Constr Crew	3
Total Hours		3

Minimum Required Grade: C

Introductory/Foundational Experience

Rule: Select 1 of the 4 options.

Select one of the following:	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	

Minimum Required Grade: C-

Production Experience

Rule: Select 1 of the 2 options.

Select one of the following:	1-3
THTR 103 Intro to House Management	
THTR 106A Theat Prod I: Run Crew	
THTR 395 Practicum	
Total Hours	1-3

Minimum Required Grade: C-

Theatre Minor Theory/Literature/History Experience

Rule: Select 1 of the 4 options.

Select one of the following:	3
THTR 202 Stagecraft I	
THTR 235L Dramatic Literature	
THTR 330H Theatre History I	
THTR 331Y Theatre History II	
Total Hours	3

Minimum Required Grade: C-

Theatre Minor Focused Area (acting, costumes, literature/history, scenery, etc.)

Rule: 12-credit minimum: 8 credits must be UD.

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.

Minimum Required Grade: C-

12 Total Credits Required

Global Leadership Certificate

The 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 Initiative Professional Certificate (p. 448)

Global Leadership Certificate Professional Certificate - Global Leadership

Degree Specific Credits: 12

Required Cumulative GPA: 2.0

Catalog Year: 2017-2018

Summary

Required Courses	6
Required Courses	6
Total Hours	12

Required Courses

Rule: Student must complete the following courses

GBLD 110	Global Challenges and Leadership	1
GBLD 194	Seminar	3
GBLD 220	Models of Leadership	2
Total Hours		6

Minimum Required Grade: C-

Required Courses

Rule: Student must complete the following 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)

GBLD 499	GLI Capstone	3
Total Hours		3

Minimum Required Grade: C-

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