UMW Mission Statement

The University of Montana Western provides innovative interdisciplinary education through experiential learning that combines theory and practice. Montana Western serves citizens of all ages with its academic, community-service, and lifelong-learning programs. As part of the global community, Montana Western encourages diversity, international awareness, environmental responsibility, and mastery of technology as a gateway to the world.

Experience One

Experience One at the University of Montana Western (UMW) is a scheduling model that allows students to apply concepts learned through hands-on experiential activities to their learning in the classroom and in the field. After several years of research and development, Montana Western has found that this process makes learning more interesting, more personal, and allows students to spend more concentrated time with their university professors.

At Montana Western, students typically take one course at a time, three hours per day, for 18 days.

Most students who have been exposed to Experience One strongly support this learning model. As a first time to college freshman or transfer student, we are confident that you will enjoy Experience One and that you will find it a highly rewarding educational experience.
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The University of Montana Western Catalog 2010-2011 -3-
# 2010-2011 Academic Calendar
## Fall Semester 2010

### COMMON DATES/DEADLINES

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registration</td>
<td>April 13-August 23</td>
</tr>
<tr>
<td>Fall Faculty Conference</td>
<td>To Be Announced</td>
</tr>
<tr>
<td>New Student Orientation; Contact Student Affairs Office</td>
<td>August 20</td>
</tr>
<tr>
<td>1st $40 late registration fee begins</td>
<td>August 24</td>
</tr>
<tr>
<td>Class schedules of non-paid students canceled</td>
<td>August 27</td>
</tr>
<tr>
<td>Weekend classes begin</td>
<td>August 28-29</td>
</tr>
<tr>
<td>Deadline to apply for Fall 2010 graduation</td>
<td>September 1</td>
</tr>
<tr>
<td>Labor Day Holiday (University closed)</td>
<td>September 6</td>
</tr>
<tr>
<td>2nd $40 late registration fee begins</td>
<td>September 8</td>
</tr>
<tr>
<td>Deadline for Summer 2011 early audit graduation application</td>
<td>September 15</td>
</tr>
<tr>
<td>Election Day</td>
<td>November 2</td>
</tr>
<tr>
<td>Veteran’s Day Holiday (University closed)</td>
<td>November 11</td>
</tr>
<tr>
<td>Registration for Spring Semester begins</td>
<td>November 15</td>
</tr>
<tr>
<td>Thanksgiving Recess (no classes)</td>
<td>November 22-26</td>
</tr>
<tr>
<td>Thanksgiving Holiday (offices closed)</td>
<td>November 25-26</td>
</tr>
</tbody>
</table>

### TERM-SPECIFIC DATES/DEADLINES

<table>
<thead>
<tr>
<th>Event</th>
<th>Block 1</th>
<th>Block 2</th>
<th>Block 3</th>
<th>Block 4</th>
<th>Full Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classes begin</td>
<td>Aug 23</td>
<td>Sep 20</td>
<td>Oct 18</td>
<td>Nov 15</td>
<td>Aug 23</td>
</tr>
<tr>
<td>Deadline to register or add classes</td>
<td>Aug 24</td>
<td>Sep 21</td>
<td>Oct 19</td>
<td>Nov 16</td>
<td>Sep 7</td>
</tr>
<tr>
<td>Class schedules of non-paid students canceled</td>
<td>Aug 27</td>
<td>Aug 27</td>
<td>Aug 27</td>
<td>Aug 27</td>
<td>Aug 27</td>
</tr>
<tr>
<td>Deadline to drop a class-No record of enrollment</td>
<td>Sep 3</td>
<td>Sep 10</td>
<td>Sep 10</td>
<td>Sep 10</td>
<td>Sep 10</td>
</tr>
<tr>
<td>Deadline to drop a class- “[W” recorded] or change to/from audit status (end 2nd week of block)</td>
<td>Sep 3</td>
<td>Oct 1</td>
<td>Oct 29</td>
<td>Dec 3</td>
<td>Oct 15</td>
</tr>
<tr>
<td>Deadline to withdraw from the University [drop ALL classes] (end 2nd week of block)</td>
<td>Sep 3</td>
<td>Oct 1</td>
<td>Oct 29</td>
<td>Dec 3</td>
<td>Dec 3</td>
</tr>
<tr>
<td>Semester final exams</td>
<td>Announced by Instructors</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Term ends</td>
<td>Sep 15</td>
<td>Oct 13</td>
<td>Nov 10</td>
<td>Dec 15</td>
<td>Dec 15</td>
</tr>
<tr>
<td>Final grades due in Registrar’s Office</td>
<td>Sep 22</td>
<td>Oct 20</td>
<td>Nov 18</td>
<td>Dec 22</td>
<td>Dec 22</td>
</tr>
</tbody>
</table>

1. Late fees are charged for approved action taken after published deadlines for Block 1; all other classes-Monday, 4th week of term
2. Students may not withdraw from any class that has ended
3. Some charges (Registration Fee, Orientation Fee, Application Fee, etc.) are non-refundable
4. Fee payment due at start of semester or immediately upon late registration
## 2010-2011 Academic Calendar
### Spring Semester 2011

#### COMMON DATES/DEADLINES

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registration</td>
<td>November 15 - January 10</td>
</tr>
<tr>
<td>New Student Orientation; Contact Student Affairs Office</td>
<td>January 10</td>
</tr>
<tr>
<td>1st $40 late registration fee begins</td>
<td>January 11</td>
</tr>
<tr>
<td>Class schedules of non-paid students canceled</td>
<td>January 14</td>
</tr>
<tr>
<td>Weekend classes begin</td>
<td>January 15 - 16</td>
</tr>
<tr>
<td>Martin Luther King Holiday (University closed)</td>
<td>January 17</td>
</tr>
<tr>
<td>2nd $40 late registration fee begins</td>
<td>February 2</td>
</tr>
<tr>
<td>President’s Day Holiday (University closed)</td>
<td>February 21</td>
</tr>
<tr>
<td>Spring Break (no classes, offices open)</td>
<td>March 7 - 11</td>
</tr>
<tr>
<td>Deadline for Fall 2011 early audit graduation application</td>
<td>March 15</td>
</tr>
<tr>
<td>Deadline for Summer Graduate Petitions to walk in Spring 2011 Commencement</td>
<td>April 1</td>
</tr>
<tr>
<td>Registration for Summer &amp; Fall Semester begins</td>
<td>April 12</td>
</tr>
<tr>
<td>Deadline for return of Spring 2011 Commencement Participation Forms</td>
<td>April 15</td>
</tr>
<tr>
<td>Deadline to apply for Summer 2011 graduation</td>
<td>May 1</td>
</tr>
<tr>
<td>Deadline for Spring 2012 early audit graduation application</td>
<td>May 1</td>
</tr>
<tr>
<td>114th Annual Commencement</td>
<td>May 7</td>
</tr>
</tbody>
</table>

#### TERM-SPECIFIC DATES/DEADLINES

<table>
<thead>
<tr>
<th>Event</th>
<th>Block 5</th>
<th>Block 6</th>
<th>Block 7</th>
<th>Block 8</th>
<th>Full Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classes begin</td>
<td>Jan 10</td>
<td>Feb 7</td>
<td>Mar 14</td>
<td>Apr 11</td>
<td>Jan 10</td>
</tr>
<tr>
<td>Deadline to register or add classes (2nd day of block)</td>
<td>Jan 11</td>
<td>Feb 8</td>
<td>Mar 15</td>
<td>Apr 12</td>
<td>Jan 21</td>
</tr>
<tr>
<td>Class schedules of non-paid students canceled</td>
<td>Jan 14</td>
<td>Jan 14</td>
<td>Jan 14</td>
<td>Jan 14</td>
<td>Jan 14</td>
</tr>
<tr>
<td>Deadline to drop a class-No record of enrollment</td>
<td>Jan 21</td>
<td>Jan 28</td>
<td>Jan 28</td>
<td>Jan 28</td>
<td>Jan 28</td>
</tr>
<tr>
<td>Deadline to drop a class [“W” recorded] or change to/from audit status (end 2nd week of block)</td>
<td>Jan 21</td>
<td>Feb 18</td>
<td>Mar 25</td>
<td>Apr 22</td>
<td>Mar 4</td>
</tr>
<tr>
<td>Deadline to withdraw from the University [drop ALL classes] (end 2nd week of block)</td>
<td>Jan 21</td>
<td>Feb 18</td>
<td>Mar 25</td>
<td>Apr 22</td>
<td>Apr 22</td>
</tr>
<tr>
<td>Semester final exams</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Announced by Instructors</td>
</tr>
<tr>
<td>Term ends</td>
<td>Feb 2</td>
<td>Mar 2</td>
<td>Apr 6</td>
<td>May 4</td>
<td>May 4</td>
</tr>
<tr>
<td>Final grades due in Registrar’s Office</td>
<td>Feb 9</td>
<td>Mar 9</td>
<td>Apr 13</td>
<td>May 11</td>
<td>May 11</td>
</tr>
</tbody>
</table>

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1. Late fees are charged for approved action taken after published deadlines for Block 1; all other classes-Monday, 4th week of term
2. Students may not withdraw from any class that has ended
3. Some charges (Registration Fee, Orientation Fee, Application Fee, etc.) are non-refundable
4. Fee payment due on 1st day of semester or immediately upon late registration
## Academic Calendar
### Summer 2011

### Tentative Common Calendar Dates/Deadlines

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deadline to apply for Summer 2010 graduation</td>
<td>May 1</td>
</tr>
<tr>
<td>Deadline for Spring 2011 early audit graduation application</td>
<td>May 1</td>
</tr>
<tr>
<td>Memorial Day Holiday (University closed)</td>
<td>May 29</td>
</tr>
<tr>
<td>Independence Day Holiday (University closed)</td>
<td>July 4</td>
</tr>
</tbody>
</table>

### Tentative Term-Specific Dates/Deadlines

<table>
<thead>
<tr>
<th>Event</th>
<th>2010 Summer Blocks</th>
<th>Multi-Block Classes</th>
<th>Generic Session Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registration (including fee payment)</td>
<td>Apr 12-May 17</td>
<td>Apr 12-Jun 14</td>
<td>Apr 12-Jul 12</td>
</tr>
<tr>
<td>New Student Orientation</td>
<td>May 16</td>
<td>------------------</td>
<td>----------------------</td>
</tr>
<tr>
<td>Classes begin</td>
<td>May 16</td>
<td>Jun 13</td>
<td>Jul 11</td>
</tr>
<tr>
<td>Deadline to register or add classes (2nd day of block)</td>
<td>May 17</td>
<td>Jun 14</td>
<td>Jul 12</td>
</tr>
<tr>
<td>$40 late fee (registration/fee payment) begins</td>
<td>May 17</td>
<td>Jun 14</td>
<td>Jul 12</td>
</tr>
<tr>
<td>Deadline to drop classes – No record of enrollment¹</td>
<td>May 20</td>
<td>Jun 17</td>
<td>Jul 15</td>
</tr>
<tr>
<td>Class schedules of non-paid students canceled¹</td>
<td>May 27</td>
<td>--------------------</td>
<td>To be Announced</td>
</tr>
<tr>
<td>Deadline to drop a class (“W” recorded) or change to/from Audit Status¹</td>
<td>May 27</td>
<td>Jun 24</td>
<td>Jul 22</td>
</tr>
<tr>
<td>Deadline to withdraw from the University (drop ALL² term/block classes)¹</td>
<td>May 27</td>
<td>Jul 1</td>
<td>Jul 29</td>
</tr>
<tr>
<td>Final exams for term/block</td>
<td>------------------</td>
<td>--------------------</td>
<td>----------------------</td>
</tr>
<tr>
<td>Last day of classes – term/block ends</td>
<td>Jun 8</td>
<td>Jul 6</td>
<td>Aug 3</td>
</tr>
<tr>
<td>Final block grades due in Registrar’s Office</td>
<td>Jun 15</td>
<td>Jul 13</td>
<td>Aug 10</td>
</tr>
<tr>
<td>Final grades for late Summer Session (July &amp; Aug) workshops due in Registrar’s Office</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

¹Late fees are charged for approved action taken after published deadlines
²Students may not withdraw from any class that has ended
³Some charges (Registration Fee, Orientation Fee, Application Fee, etc.) are non-refundable
⁴Fee payment due at start of semester or immediately upon late registration
⁵Excludes Workshops—see printed Outreach Schedule for dates and payment information
Montana Western’s Admissions Office provides accurate, timely, and consistent information about UMW to prospective students through the highest quality presentations, publications, and personalized service possible. In meeting its mission, the department helps further the institutional strategic plan by increasing enrollment, diversity in the student body, retention, and positive public image and perception. Ultimately, the goal is to make sure the process of applying to Montana Western runs smoothly and meets the needs of all students.

Applications for admission are accepted from in-state, out-of-state, and international students. Staff assist full-time, part-time, and non-degree applicants through the admission process.

Campus Visits
Visiting the campus is an important step in selecting a college or university. The Admissions Office arranges individualized campus visits Monday through Friday. Guided by students, campus tours acquaint prospective students and their families with on-campus living options, academics, extracurricular activities, athletics, services, faculty, staff, and fellow students. It is recommended that visit arrangements be made one week in advance to allow scheduling of meetings that accommodate the prospective student’s individual interests.

Admissions Standards
All students seeking certification or a degree must be fully admitted to Montana Western. Students are responsible for submitting applications and supporting documentation for admission, immunization, financial aid, and housing. Montana and out-of-state freshman applicants who do not meet the admission requirements or the Montana Regents College Preparatory requirements may be considered for an admission exemption. Priority consideration will be given to students who apply prior to:
- March 1 for Fall Semester.
- December 1 for Spring Semester.
- May 1 for Summer Session.

Freshman Admission

Freshman Application Process
1. Submit a completed UMW paper Application for Admission, or apply online at www.umwestern.edu/admissions and click on “Apply”. Paper applications are available by contacting the Admissions Office.
2. Submit a $30 non-refundable application fee.
3. Submit an SAT I or ACT test score report (writing subscores required).
5. Submit proof of two measles, mumps, and rubella (MMR) immunizations.
6. Submit a final official high school transcript or GED report.

When to Apply
Applicants are encouraged to apply:
- by July 1 for the upcoming Fall Semester.
- by October 15 for Spring Semester.
- by March 15 for Summer Session.

Students will not be considered for scholarships, financial aid, or housing, nor will they be eligible to register for classes, until their admissions application is processed and acceptance is granted.

Freshman Admissions Requirements
Freshman applicants must satisfy one of the following three admissions standards:
1. ACT composite score of 22 or higher, or SAT I combined Mathematics/Critical Reading/Writing Score of 1540 or higher;
2. Cumulative high school Grade Point Average of 2.50 or higher;
3. Rank in the upper half of their high school graduating class.

Applicants must provide their ACT or SAT I scores to Admissions. Freshman applicants must have completed the College Preparatory requirements stated above, OR may satisfy UMW admissions requirements by providing evidence that they have met one of these two requirements:
1. completed a similar college preparatory program required by their home state (evidence of completion of such a program must be certified by the high school).
2. if the applicant’s state has no college preparatory program, meet two of the three numeric requirements (ACT/SAT I, High School GPA, High School class rank) listed under Freshman Admission Requirements.

Students who complete their secondary education through home schooling or at an unaccredited high school may satisfy the requirement of high school graduation by providing evidence that they have met the following:
1. High School Equivalency Certificate based on the GED exam.
2. satisfactory performance on the ACT, SAT, or COMPASS examinations.

Montana Board of Regents College Preparatory Curriculum
1. Four years English.
2. Three years mathematics 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.
3. Three years social studies including a Global Studies course (such as World History or World Geography); American History; and Government, Economics, Indian History, or other third year courses.
4. Two years laboratory science.
5. Two years chosen from the following:
   a. foreign language (preferably two years of the same language).
   b. computer science.
   c. visual and performing arts.
   d. vocational education units that meet Montana Office of Public Instruction guidelines.

Out-of-state freshman applicants must have completed the College Preparatory requirements stated above, OR may satisfy UMW admissions requirements by providing evidence that they have met one of these two requirements:
1. completed a similar college preparatory program required by their home state (evidence of completion of such a program must be certified by the high school).
2. if the applicant’s state has no college preparatory program, meet two of the three numeric requirements (ACT/SAT I, High School GPA, High School class rank) listed under Freshman Admission Requirements.

Mathematics Proficiency Standard
In addition to the admissions requirements, any student seeking full admission to a University of Montana Western four-year degree program must satisfy a mathematics proficiency standard.
Beginning Fall 2010, any student seeking full admission to a four-year degree program must have a minimum mathematics (quantitative) score of one of the following:
1. ACT score of 22 or above.
2. SAT I score of 520 or above.
3. AP Calculus AB or BC Subject Examination score of 3 or above, or IB Calculus test score of 4.

A student whose mathematics score is 18-21 on the ACT or 440-510 on the SAT meets the mathematics requirement for admission without condition to any two-year degree program or provisional admission to a four-year degree program on any campus of the Montana University System (MUS).

A student whose mathematics score is below 18 on the ACT or 440 on the SAT may be admitted without condition to any two-year degree program of the MUS, but may not be admitted to a four-year degree program of the MUS.

Students may offer CLEP Subject Examinations in selected topics (College Algebra, College Algebra-Trigonometry, Pre-Calculus, Calculus, or Trigonometry) if their scores on the examination meet or exceed the ACE Recommended Score for Awarding Credit of 50.

Students may be excused from any testing in mathematics and deemed proficient if they complete a Rigorous High School Core including four years of mathematics in high school (Algebra I, Algebra II, Geometry, and a course beyond Algebra II, as outlined in the matrix attached to Board of Regents Policy 301.15 as Appendix I) with grades of C or better in all courses.

Students who have been denied full admission to a four-year program at UMW because they do not meet the mathematics proficiency standard set forth in this policy may prove that they have the appropriate proficiency in the following ways:
1. within 3 semesters or 32 credits of enrolling, earn a C- grade or better in a college course entitled Intermediate Algebra or Algebra for College Students, or in a college course that is the prerequisite to any of the courses; or
2. earn a C- grade or better in a mathematics course that satisfies the general education program requirement described in Board of Regents Policy 301.10; or
3. earn a score of 22 or above on the mathematics portion of the SAT or 520 or above on the mathematics portion of the ACT; or
4. earn a score of at least 60 on the COMPASS Algebra exam, or an equivalent score on another placement exam used by the campus, upon enrollment; or
5. complete an Associate of Arts (AA) or Associate of Science (AS) degree.

Writing Proficiency Standard
Any student seeking full admission to a four-year degree program at Montana Western must satisfy the following writing proficiency standard:

Students must earn a minimum score of one of the following:
1. Score of 7 on the Writing Subscore or an equivalent score on the Combined English/Writing section of the Optional Writing Test of the ACT.
2. Score of 7 on the Essay or an equivalent score on the Writing Section of the SAT.
3. Score of 3.5 on the Montana University System Writing Assessment.
4. Score of 3 on the AP English Language or English Literature Examination.

In lieu of the indicators set out above, students may offer CLEP Subject Examinations in Composition if their scores on the examination meet or exceed the ACE Recommended Score for Awarding Credit of 50.

The University of Montana Western Catalog 2010-2011
Transfer Student Admission

Transfer Student Requirements
(Note: International transfer students may be required to submit additional items—see page 10.)
1. Submit a completed UMW paper Application for Admission, or apply online at www.umwestern.edu/admissions and click on “Apply”. Paper applications are available by contacting the Admissions Office.
2. Submit a $30 non-refundable application fee.
3. Submit official transcripts from all colleges/universities previously attended.
4. Submit proof of two measles, mumps, and rubella (MMR) immunizations.

What the Student Can Expect from Montana Western
Within ten working days after a student’s admissions file is complete with ALL information listed above, Montana Western will provide new applicants with written notification of the following:
1. Total credits accepted at Montana Western.
2. The GPA of the transfer courses that have been accepted.
3. The student’s classification and academic standing at Montana Western based upon accepted coursework.
4. A completed Transfer Evaluation Sheet indicating how accepted transfer courses will apply to the applicant’s UMW program of study, including the General Education Core.
5. A listing of remaining/uncompleted coursework that must be taken at Montana Western (applicants must provide or communicate education program goals to receive this information).
6. Admission decision.

When to Apply
Applicants are encouraged to apply:
- by July 1 for the upcoming Fall Semester.
- by October 15 for Spring Semester.
- by March 15 for Summer Session.

Students will not be considered for scholarships, financial aid, or housing, nor will they be eligible to register for classes, until their admissions application is processed and acceptance has been granted.

Transfer Student Policies

Credits Accepted for Transfer
The following policies guide Montana Western’s decisions as to whether transfer courses or credits are accepted for transfer:
1. Coursework and credits must be college-level and applicable to a degree at the transfer institution.
2. Courses must have been taken at a nationally accredited college/university in the United States. Coursework from foreign institutions is evaluated on a case-by-case basis; foreign credentials must be officially translated to English as part of the admissions process.
3. All transfer course credits will be converted to semester credits.
4. There are no limitations on transfer credits accepted if transferred from a four-year regionally accredited post-secondary institution or from a two-year technology institution. Note that no upper-level credit will be awarded for courses completed at a two-year institution.
5. Approved courses that are passed with grades “A” through “D-”, plus “P” or “S” grades, will be accepted for transfer to UMW, but only applicable courses graded “C-” or higher will be used to satisfy degree requirements at UMW. However, students transferring to Montana Western must maintain an overall GPA of 2.00 while at UMW.
6. Students who complete a General Education program at a unit of the Montana University System and those who complete the MUS General Education Core are deemed to have completed the General Education program at UMW.

Credits Used to Meet Requirements (Transfer Credits)
The following general policies guide Montana Western’s decisions as to how an accepted transfer course can be used to meet requirements for UMW degrees or programs:
1. To be applied to a degree at UMW, the transfer course content must be similar or equivalent to the required UMW course, or the transfer course must be an acceptable substitute or elective.
2. The number of course credits must be similar (e.g., three vs. four credit differences are acceptable, two vs. four credits are not). Students may take Independent Study or Directed Study to make up credit deficiencies.
3. Course level must be similar (e.g., a 100/200 level course from the transfer institution may not be used to meet a 300/400 level requirement at UMW).
4. Courses must be successfully completed with grades of “C-” or better; grades of “S” and “P” are accepted but with limited application; department and/or division approval is required.
5. Some courses may need further evaluation as to their applicability toward a given program; substitution/waiver forms should be used to document department and division approval of such applicability. Courses subject to this further review and approval will need more time for certification than the 10 working days.
6. All transfer students must successfully complete at least one-fourth (25%) of the coursework required for a degree while in residence at UMW. A majority of courses required in the Major and/or Minor must be taken at UMW and generally these courses must be the last courses taken prior to graduation (see Degree Residency Requirements section of this Catalog).
7. No student will graduate from UMW with less than a 2.0 institutional GPA; however, some degree programs require a higher minimum GPA.
8. The UMW Registrar will record only summary transfer course data on a student’s UMW academic record. “Summary” information includes the name of the transfer institution, dates of enrollment, total college-level credits, degree-applicable credits earned, plus attempted GPA hours, grade points earned, transfer institution GPA, and total hours attempted.
9. Only the UMW GPA appears on a student’s transcript, although total hours earned will reflect all credits earned at UMW and those accepted from other colleges attended. All courses attempted at all institutions attended will be used to calculate a cumulative GPA for purposes of determining eligibility for top student in the UMW graduating class, athletic eligibility according to NAIA or NIRA regulations, and/or instances where third parties authorized to have such information request such a calculation.

10. Limitations on Transfer Credits:

<table>
<thead>
<tr>
<th>Maximum Transfer Credit Applied</th>
<th>UMW degree</th>
<th>If transferred from 4-Year College/University</th>
<th>If transferred from 2-Year/Technology School (*No upper-level credit awarded)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Associate Degree (64 credits)</td>
<td>48 semester credits</td>
<td>48 semester credits</td>
<td></td>
</tr>
<tr>
<td>BAS, BA, Non-Education (120 credits)</td>
<td>90 semester credits</td>
<td>60 semester credits</td>
<td></td>
</tr>
<tr>
<td>BS Education Degree (128 credits)</td>
<td>96 semester credits</td>
<td>64 semester credits</td>
<td></td>
</tr>
</tbody>
</table>

11. Transfer applicants who complete a general education core at one of the units of the Montana University System, or those who complete the MUS General Education Core are deemed to have satisfied the general education requirements for a degree (Associate or Bachelor) at UMW.
12. Outdated (Transfer) Coursework: “Acceptable” transfer courses that are more than five years old at the time of admission to UMW, at the discretion of the University, may be excluded from consideration in meeting major/option, minor/related area, or professional requirements for a degree. Acceptable transfer courses that are more than 15 years old at the time a student is admitted to UMW, at the discretion of the University, may be excluded from consideration in meeting general education or elective requirements for a degree (MUS Board of Regents Policy 301.5.1).
Montana University System (General Education) Core Curriculum

New students transferring to UMW from any of the units of the Montana University System (MUS) or one of the three public community colleges in Montana (Flathead Valley Community College, Dawson Community College, Miles Community College) and who have satisfactorily completed a minimum of twenty (20) credits of campus-specific general education courses (distribution requirements considered) prior to transferring to UMW can elect to complete the MUS (General Education) Core Curriculum in lieu of the UMW General Education program. Information on the MUS core can be viewed online at http://mus.edu/transfer/gened.asp.

New transfer students who are eligible for this option should communicate their choice of General Education programs (UMW or MUS) at the earliest possible time so that UMW personnel (faculty advisors and Advising Office staff) may provide the most accurate and reliable degree advice possible.

Appeals – Transfer of Credits

Appeals regarding the acceptance of transfer credits should be directed to the UMW Registrar. Questions or appeals concerning the application of courses or credits to a specific degree or program of study should be directed to the Director of Student Success.

Residency Classification

The Montana University System classifies all students and applicants for admission as either in-state or out-of-state for college/university fee payment purposes. The basic rules for making this classification are found in Board of Regents Policy available at the Registrar’s Office. Determination of student residency is based on information provided on the MUS Residency Questionnaire and supporting documentation supplied by the petitioner. With certain exceptions, in order to be eligible for in-state status a person must be one of the following:

1. a lifelong resident of Montana,
2. independent and complete a 12-month waiting period1 during which one must reside in the state and demonstrate a bona fide intent to become a Montana resident,
3. a recent graduate of a state-approved high school in Montana and have attended the entire senior year there.

1. It is presumed that an individual not eligible for in-state status under Board of Regents Policy who is registered for more than six semester credits at any post-secondary educational institution in the State of Montana is present in the State primarily for educational purposes, and such periods may not be applied to the 12-month waiting period referred to previously.

The 12-month waiting period does not begin until some act indicative of intent to establish residency is taken. Mere presence in Montana and enrollment at a unit of higher education will not serve to start the 12-month waiting period. Sufficient acts of intent include:

1. registering to vote in Montana,
2. obtaining a Montana driver’s license,
3. licensing/registering a vehicle (owned by the applicant) in Montana,
4. purchasing a home or primary residence in Montana,
5. filing a resident Montana tax return on all earned income.

One act will start the waiting period; however, it is a preponderance of actions that indicates intent to become a resident.

If none of these indicators is available to the student, the student may file an Affidavit of Intent to Establish Residency form in order to begin the 12-month waiting period.

After the 12-month period has begun, the individual is expected to act in a manner consistent with Montana residency. Actions deemed in contradiction with the claim of Montana residency may result in classification as a non-resident for Montana University System fee payment purposes. Examples of such contradictory actions include:

1. voting absentee in another state,
2. receiving financial aid based on non-Montana residency such as a state scholarship or guaranteed student loan from another state or participation in an interstate exchange program [it is presumed that a student attending a unit of the Montana University System under the Western Undergraduate Exchange (WUE), the National Student Exchange (NSE), and other exchange programs are deriving a financial benefit from another state based on non-Montana residency and therefore is not eligible for Montana residency while a student],
3. leaving the state of Montana and being away for long periods of time (20 days or more) during the 12-month residency establishment period.

In-state status cannot generally be earned via marriage. Each individual must qualify for in-state status separately.

The initial residency classification may be appealed. Although students are permitted to petition for reclassification at any time, in order to be eligible for in-state status for fee purposes it is necessary to meet the requirements for such status before the first instructional day of the school semester for which the status is sought. Information regarding appeals of residency classification is contained in the Board of Regents Student Guide to Montana Residency Policy. This guide and the MUS Residency Questionnaire petition for in-state status are available online at http://mus.edu/residency/default.asp.

International Student Admission

International Student Requirements

Montana Western welcomes the cultural and academic stimulation international students bring to its campus. Students from other countries who have completed a secondary school are considered freshmen; those who have completed college-level coursework equivalent to 12 credits or more beyond secondary school are considered transfer students.

The following credentials are required in the Admissions Office for international student applicants:

1. Application Form—available from the Admissions Office or online at www.umwestern.edu/admissions.
2. Application Fee—a $50 non-refundable fee is required of all applicants. The fee must be in U.S. currency, and must be paid before the application will be processed. Checks should be made payable to UMW.
3. English Language Proficiency—citizens of countries other than Australia, Canada, England, Ireland, New Zealand, Scotland, or Wales are required to certify English proficiency by providing an official Test of English as a Foreign Language (TOEFL) score report. A minimum score of 500 on the paper-based test, 173 on the computer based-test, and 61 on the internet-based test is required. Any questions regarding TOEFL should be directed to TOEFL, P.O. Box 899, Princeton NJ 08541. UMW does not offer an English as a Foreign Language class.

Results of the SAT II: English Language Proficiency Test (ELPT) may be used in lieu of TOEFL, with a required minimum score of 590.

4. Academic Credentials—applicants must submit a certified copy of secondary school transcripts or the equivalent, and any college or upper-level transcripts. International students who have attended institutions outside the United States or Canada must request an evaluation of Academic Credentials from a foreign credential evaluation service. Evaluation of credit may not reflect actual college credits accepted by UMW. Allow 8-12 weeks for the evaluators to complete the evaluation process. Foreign credential evaluation services charge a fee for credit evaluation. Contact the following services for information and applications for credit evaluation:

ECE (Educational Credential Evaluators, Inc.)
PO Box 514070
Milwaukee WI 53203-3470
FAX: 414-289-3411
www.ece.org (applications for evaluation may be downloaded)
4. Submit official copies of transcripts from all institutions attended since last enrolled at UMW.
5. Proof of measles, mumps, and rubella (MMR) immunization may be required if initial attendance at UMW was three or more years previous to request for readmission.
6. Meet the admission requirements of a transfer student if the student attended another institution since last registering at UMW.
7. An application fee is not required unless a student is changing status to a second degree student.

Non-Degree Student Admission
Applicants who are unable to meet all the requirements for admission, but who are not candidates for a degree, may be considered for admission without meeting the usual entrance requirements if they provide satisfactory evidence that they are academically prepared to pursue the special courses desired. All first-time UMW students must provide proof of two immunizations for measles, mumps, and rubella (MMR) and pay the one-time non-refundable $30 application fee. Other requirements may also be imposed.

A non-degree student must acquire status as a regular student and become a candidate for graduation by maintaining good standing academically and completing all entrance requirements for admission.

Dual Credit Admission
In collaboration with several Beaverhead and Madison County high schools, UMW has developed interlocal agreements that allow 11th and 12th grade students, as defined by the school district, dual enrollment in high school and select college courses. Students must be fully admitted to Montana Western. Dual credit students may enroll in a maximum of eight credits per semester.

To apply for admission, students must submit:
1. a completed Application for Admission form.
2. a $30 non-refundable application fee.
3. an official high school transcript, sent directly from the high school to the UMW Admissions Office.
4. proof of two measles, mumps, and rubella (MMR) immunizations.
5.  written approval from the applicant’s parents/guardians.

Each of these must be identified on the record in English and must be signed by a licensed physician or registered nurse.

7. Submit proof of a valid visa.

If admitted, the applicant will receive an international student acceptance packet containing a letter of acceptance, an evaluation of transfer credit, and an I-20 form needed to obtain an F-1 student visa.

When to Apply
All of the above requirements must be received by Admissions according to the following schedule:
- by March 1 for Fall Semester.
- by October 1 for Spring Semester.
- by January 1 for Summer Session.

Additionl Admission Categories

Former Student Re-Admission
Any former UMW student who did not attend UMW the preceding year may be readmitted after completing the following requirements:
1. Submit a completed Application for Readmission, available from the Registrar’s Office or online as a “printable form”.
2. Submit official copies of transcripts from all institutions attended since last enrolled at UMW.
3. Proof of measles, mumps, and rubella (MMR) immunization may be required if initial attendance at UMW was three or more years previous to request for readmission.
4. Meet the admission requirements of a transfer student if the student attended another institution since last registering at UMW.
5. An application fee is not required unless a student is changing status to a second degree student.

To register for dual credit courses, students must:
1. be enrolled in a school district with an interlocal agreement with UMW.
2. obtain a signature from a parent or guardian that acknowledges financial responsibility for payment of college tuition and fees.
3. obtain a signature from a high school official attesting to the student’s maturity and academic ability.

Early Admission—Concurrent High School/College Enrollment
The UMW Early Admission program allows students who have not yet graduated from high school to be considered for conditional admission. As admission is very selective, Early Admission applicants must demonstrate academic ability and general maturity to warrant such acceptance. Candidates must be able to handle university-level coursework while at the same time continuing completion of high school graduation requirements. Applicants must be juniors or seniors in high school to be considered for Early Admission. Each application is considered on an individual basis.

To apply for Early Admission, candidates must submit:
1. a completed UMW paper Application for Admission form, or apply online at www.umwestern.edu/admissions and click on “Apply”. Paper applications are available by contacting the Admissions Office.
2. a $30 non-refundable application fee.
3. a letter of recommendation from the high school principal or other high school official attesting to the student’s academic ability and general maturity.
4. an official high school transcript, sent directly from the high school to the UMW Admissions Office.
5. proof of two measles, mumps, and rubella (MMR) immunizations.
6. written approval from the applicant’s parents/guardians.

Early Admission students may enroll in a maximum of eight credits per semester. Final grades for Early Admission students are withheld pending receipt by UMW of a final high school transcript verifying graduation from high school.

Dual Admission with Flathead Valley Community College
Students may apply for joint admission to UMW and Flathead Valley Community College (FVCC) using a form available from FVCC. Students accepted for dual admission will not be required to pay an additional application fee when transferring to UMW if criteria for transfer are met under the agreement. These criteria include having a minimum grade point average of 2.00 from all colleges or universities previously attended and an Associate Degree or 60 semester credits from FVCC. Students admitted to the dual admission program are entitled to obtain a UMW student identification card that entitles them to certain privileges at Montana Western, such as library use. These privileges begin as soon as the student enters FVCC under the dual admission program.
Previously Earned Credit

Credit for Nontraditional Learning Experiences
UMW has established specific policies that govern the recognition and awarding of credit for learning experiences that occur outside the traditional college classroom. As part of the admissions application process, prospective students should provide official documentation that identifies and describes the kind of learning experience they have completed (i.e., AP or CLEP score reports, military training completion certificates, Tech Prep contracts, etc.). Enrolled students attempting or completing a nontraditional learning program should provide such documentation upon completion of the learning program. Individuals who are considering earning credit via nontraditional methods (with the idea of having those program credits meet part of a UMW degree requirement) should consult with all appropriate UMW officials (Academic Department Chairs, Advising Office officials, Registrar, etc.) before committing resources.

Advanced Placement (AP) Program
Credit may be earned by satisfactory completion of the Advanced Placement Tests from the College Entrance Examination Board. Students must provide official AP exam score reports. For more information regarding minimum scores and application of AP exam credits to degree requirements, contact the Registrar’s Office, (406) 683-7731.

College Level Examination Program (CLEP)
Credit may be earned by satisfactory completion of the College Entrance Examination Board College Level examinations. Official score reports must be sent from the College Board directly to the UMW Admissions or Registrar’s Office. Credit for specific CLEP Subject Examinations and minimum score requirements are outlined in the UMW CLEP policy available at the Registrar’s Office. Credits received through CLEP will be issued “P” (Pass) grades. For more information contact the Registrar’s Office.

Military Service Training Credit
UMW may grant credit for selected and successfully completed learning experiences acquired as part of United States military training programs. Such training must be college level as recommended by the American Council on Education in the “Guide to Evaluation of Educational Experiences in the Armed Services.” Application of military training credits to specific UMW program requirements is contingent upon department faculty approval. Individuals seeking credit for military training must submit a letter to the Registrar’s Office requesting evaluation of military experience, together with official documentation (certificates of completion) of their formal military training.

Tech Prep Program
Tech Prep is a program negotiated between UMW and specific high schools whereby certain high school courses may earn university credit at UMW. Written agreements between area high schools and Montana Western specify which courses can be articulated and outline minimum competencies and levels of knowledge and achievement that must be met to earn credit. To earn credit, students must matriculate at UMW within two years of completion of the courses that meet Tech Prep requirements. Tech Prep credits do not meet residence requirements and the program is considered a nontraditional method of earning credit. Other limitations may apply. See Tech Prep Policy and appropriate high school/UMW agreement, or contact Montana Western’s Tech Prep Coordinator, (406) 683-7711.

Course Challenge Exams
Students initiate the course challenge exam procedure by contacting the Chairperson of the Department through which the course is to be challenged. Department Chairs, or regular UMW faculty, must agree to oversee the course challenge process. Details of the course challenge (exam time and place, evaluation criteria, and requirements, etc.) must be documented and agreed to by the student, the supervising faculty, and the Provost. Upon final approval, the student enrolls in the course to be challenged and pays all fees. Supervising faculty administer challenge exams and determine whether students earn credit. Courses attempted via institutional challenge exams are graded “Pass/Fail” and become part of the student’s permanent academic record. Copies of the course challenge petition and related documentation are filed in the Registrar’s Office. Students may not challenge college courses they have previously attempted (e.g., failed, audited, dropped). UMW officials will determine equivalency/similarity of transfer courses. Only degree-pursuing students enrolled in a regular curriculum may petition to challenge a course at UMW. Regular tuition and course fees will be charged upon enrollment in a course to be challenged.

Additional Admission Information

Immunization Requirements
The Montana School Immunization rules reflect the requirements of the State Immunization Law (MCA 20-5-401). Current immunization recommendations related to UMW and other post-secondary students state that “All non-foreign students entering any institution of the Montana University System born after December 31, 1956, must show proof of immunization against measles and rubella on or after their first birthday and after December 31, 1967.”

1. Two doses of measles vaccine are required for students entering a post-secondary school in Montana. This only affects those post-secondary students who are in a degree program or who are registered for more than one-half of a full-time credit load normal for that school. Only MMR (measles/mumps/rubella) vaccine is acceptable for immunizations given after June 11, 1993, to meet the rules for vaccination against measles or rubella.

2. A conditional enrollment period is allowed for students who arrive at school and lack even one dose of measles vaccine. These individuals are allowed to attend classes after they receive a first dose of MMR vaccine and are conditionally enrolled at UMW until the start of the next term.

3. Applicants born prior to January 1, 1957, are exempt from immunization requirements if they provide documentation of age as described above.

4. Requests for exemptions to the immunization requirements will be reviewed by the Admissions Office.

General Equivalency Degree (GED)
A student may be admitted to UMW upon presentation of an official high school equivalency certificate issued by the Montana Superintendent of Public Instruction under authorization of the Board of Public Education. The high school equivalency certificate based on the GED examination may not be used to satisfy the requirement of high school graduation until after the student’s high school class has graduated.

Further information regarding requirements and test center locations in Montana may be obtained from the Office of Public Instruction, PO Box 202501, Helena MT 59620-2501.
Western Undergraduate Exchange (WUE)
Montana Western participates in the Western Undergraduate Exchange, a program of the Western Interstate Commission for Higher Education and other western states. Through WUE, certain non-Montana resident students may enroll at UMW, paying resident tuition plus 50 percent of that amount, plus other fees that are paid by all students.

Because Montana Western participates, residents of Montana may enroll under the same terms in designated institutions and programs in other participating states. WUE states include Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, North Dakota, Oregon, South Dakota, Utah, Washington, and Wyoming.

Information about WUE programs available at Montana Western may be obtained from the Admissions Office. Montana residents interested in information about WUE programs in other states may contact one of the following:

Certifying Officer for Montana
WICHE Student Exchange Program
2500 Broadway
Helena MT 59620-3101
(406) 444-6570

WICHE Student Exchange Program
PO Drawer P
Boulder CO 80301-9752
(303) 497-0210

General Information About Montana Western

Nature of the Institution
The University of Montana Western, an innovative four-year public institution, is located in Dillon and Beaverhead County in southwestern Montana. Montana Western is a comprehensive university with programs, emphasizing active, hands-on experiential learning. To better facilitate this type of learning, Montana Western transitioned to Experience One block scheduling in fall 2005. Under this system, students typically take a single course at a time, three hours per day, usually four courses per semester. Each course lasts for 18 instructional days over three and one-half weeks.

Excellence in undergraduate instruction is Montana Western’s primary goal, enhanced by close student-faculty relationships, fine teaching facilities, and an exceptional academic environment. Public service and research by faculty, staff, and students contribute to the broader mission of the institution. Montana Western has programs in the arts and sciences, teacher education, early childhood education, business, equine studies, natural horsemanship, and tourism.

Institutional Philosophy
Montana Western believes learning is best accomplished by having students engaged in authentic learning activities within each academic discipline. With the skilled and knowledgeable guidance of its professors, UMW’s academic programs feature many opportunities for field experiences, labs, projects, and internships.

By fostering a hunger for knowledge, appreciation for differences in people and ideas, and pride in creative and technical achievements, UMW provides a foundation for lifelong personal growth and productivity. Montana Western’s philosophy fosters well-rounded graduates who are sensitive yet skeptical, skillful in special areas yet reflective about general themes, aware of their complex world and committed to its improvement. Graduates are prepared to be good citizens as they contribute positively to social structure and the economic vitality of the communities in which they reside.

Constituencies Served
The primary reason for Montana Western’s existence is to serve the educational needs of Montana citizens, businesses, and other organizations. Montana Western serves people of all ages—from infants to senior citizens—through programs offered on its campus by the university or by other affiliated organizations. Students enrolled in UMW courses and programs are both traditional-aged recent high school graduates and nontraditional-aged students. Increasing numbers of out-of-state students add to campus diversity and greatly contribute to making Montana Western a more interesting place to obtain a university degree while participating in abundant extracurricular activities.

Accreditation
The University of Montana Western is a member of:
The American Association of State Colleges and Universities (AASCU).
The American Association of Colleges for Teacher Education (AACTE).

The University of Montana Western is accredited by:
The Northwest Commission on Colleges and Universities (NWCCU).

The University of Montana Western teacher education programs are accredited by:
The National Council for the Accreditation of Teacher Education (NCATE).

The University of Montana Western has received specialized accreditation for its Bachelor of Science and Bachelor of Applied Science degree programs in business through:
The International Assembly for Collegiate Business Education (IACBE), Olathe, Kansas.
History of Montana Western

The Act of Congress under which the State of Montana was admitted to the Union set aside 100,000 acres of the public domain for the establishment and support of a State Normal School in 1893. The Legislature of 1897 created an Executive Board, which selected a president and faculty. The first session of the school opened September 7, 1897.

In 1903, the Legislature changed the name of the institution to State Normal College. On April 6, 1931, the State Board of Education approved the four-year course and authorized conferring the degree of Bachelor of Education. On December 8, 1947, the State Board of Education changed the name of the degree to Bachelor of Science in Elementary Education. Effective July 1, 1949, the Legislative Assembly changed the institution’s name to Western Montana College of Education.

In April 1954, the State Board of Education authorized the granting of a Bachelor of Science degree in Secondary Education and the degree of Master of Science in Education. Effective July 1, 1965, the 1965 Legislature changed the name of the institution to Western Montana College.

At the January 1987 meeting of the Board of Regents of the Montana University System, the Board took action to administratively merge Western Montana College with The University of Montana. Montana Western became a four-year affiliated campus of The University of Montana in July 1988, and the name of the campus became Western Montana College of The University of Montana. A Bachelor of Arts degree with multiple option areas was authorized by the Board of Regents in 1991 with five thematic areas: Environmental Sciences, Literature & Writing, Pre-professional Health Sciences, Social Science, and Visual Arts.

In January 2001, the Board of Regents authorized a name change to the University of Montana Western, and approval was granted by the 2001 Montana Legislature effective July 1, 2001. With this change, UMW gained university status in recognition of the breadth and strength of its academic programming.

A Bachelor of Science degree in Business was approved and an Associate of Applied Science degree in Equine Studies was conditionally approved by the Board of Regents beginning fall semester 2002.

An Associate of Applied Science in Education Studies, an online Bachelor of Science in Early Childhood Education, and a Library Media K-12 Minor offered in collaboration with The University of Montana-Missoula were approved by the Board of Regents beginning fall 2003.

An Associate of Applied Science degree in Natural Horsemanship was approved effective fall 2004. Beginning fall 2005, Montana Western began offering a Bachelor of Science degree in Natural Horsemanship and revised the BA: Pre-Professional Health Sciences Option to a Biological & Biomedical Sciences Option in the Bachelor of Arts, which was then revised to a Biology Option effective fall 2006.

Montana Western began Experience One scheduling for all first-time baccalaureate-seeking freshmen in fall 2004, with the full transition to Experience One occurring in fall 2005. Effective fall 2006, the Board of Regents approved an Earth Science Major in the Bachelor of Science Secondary Education degree, an Environmental Interpretation Option in the Bachelor of Arts degree, and granted full approval for the AAS in Equine Studies. Effective fall 2007, the Health & Human Performance K-12 Major in the Bachelor of Science Secondary Education was revised to a Physical Education & Health K-12 Major. Effective fall 2007, the BS: Business degree was revised to BS: Business Administration, and a new BA Option in Mathematics was approved.

Location

With a population of 5,500, Dillon is situated in the beautiful Beaverhead Valley. The town is the center of ranching, mining, and recreational activities. Winters are historically mild and summers are pleasant with cool nights. The valley is noted for its typically crystal clear air and blue skies with abundant snow in the surrounding mountains but relatively little snow or rain in the valley.

Dillon provides a safe, small-town environment for Montana Western. Community concerts, theater, and other programs serve cultural needs of the community. Also available are churches of various denominations, public library, YMCA, two golf courses, parks, hospital, and social and fraternal organizations. Many nearby recreational areas provide opportunities for nature study, picnics, hiking, horseback riding, hunting, fishing, snowmobiling, and skiing.

The area is rich in historical interest. The Big Hole Battlefield, Bannack (first territorial capital), and Virginia City (second territorial capital), are within easy driving distance. The Lewis and Clark Expedition’s travels through the Beaverhead Valley in 1805 are commemorated at Clark’s Lookout State Park located one mile north of Dillon. One of the sources of the Missouri River is found in a tiny stream emerging from a spring in the area’s hillside. A museum, developed by the Beaverhead Museum Association, houses many relics from the region’s early days.

Located in the southeastern residential section of Dillon, Montana, the beautiful campus consists of well-developed lawns, shade trees, walks, and historical and picturesque buildings. A visitor to the Montana Western campus enjoys an unsurpassed panoramic view of southwest Montana, with several beautiful mountain ranges punctuating the surrounding landscape and a wide variety of recreational activities for the outdoor enthusiast located within a short distance.

The campus is convenient in terms of physical space, layout of facilities, and proximity to community resources, providing easy access to friendly student-centered faculty, personnel, and services. Montana Western is committed to fostering a sustainable environment and is heated by biomass. Recent renovations including energy efficiency projects and a restoration of historic Main Hall contribute to UMW’s emerging role as an innovative regional interdisciplinary arts and sciences university while maintaining its tradition of excellence in teacher education, business, two-year associate degree, and certificate programs.
Code of Conduct

The Student Code of Conduct, embodying the ideals of academic honesty, integrity, human rights, and responsible citizenship, governs all academic work and student behavior at Montana Western. Student enrollment presupposes a commitment to the principles and policies embodied in the Code, which sets forth standards of acceptable student conduct, disciplinary sanctions for breach of the standards of student conduct, and procedures to be followed in adjudicating charges of both academic and non-academic misconduct. Published in the Student Handbook (http://www.umwestern.edu/studentlife/studenthandbook.pdf), the Student Conduct Code is administered by the Dean of Students.

Rights & Responsibilities

Statement of Responsibility
The Montana Western community values personal and academic freedom and embraces the ideals of academic honesty and integrity. All members of the campus community have the personal responsibility to promote an atmosphere of civility in which the free exchange of ideas and opinions can flourish. This is accomplished by learning from individual and collective differences and by respecting every human being.

Equal Opportunity
Students are assured the protection of all rights guaranteed by the Montana and United States Constitutions. Montana Western is committed to provide all persons an equal opportunity for education, employment, and participation in University activities without regard to the individual’s race, color, religion, national origin, sex, age, marital status, or handicap. The University has established a discrimination grievance procedure for any student or applicant for employment or admission who claims to have been unlawfully discriminated against because of any University regulation, policy, practice, or the official action of any University employee.

Students alleging discrimination at Montana Western are encouraged to contact the Student Affairs Office, Davis Hall, (406) 683-7565, or the Affirmative Action Officer, Business Services, (406) 683-7101, within 60 calendar days of the alleged discrimination.

Disabilities: Students with disabilities seeking services from the University should notify the Student Affairs Office as soon as possible regarding their disability so that services and access can be determined in a timely fashion.

Understanding One’s Rights & Responsibilities
Students are responsible for making informed enrollment decisions and for understanding and complying with the material that details policies and standards of student conduct in this Catalog and in the Student Handbook. Students are also held responsible for complying with policies and procedures governing all aspects of enrollment at Montana Western including registration, grading, class schedule changes (dropping, adding, withdrawing), class or credit load, financial aid, enrollment and fee payment dates and deadlines, graduation requirements, for example.

Students are responsible for determining and communicating their education goals. Montana Western encourages students to provide this information when filing their admissions application or as soon as possible following their initial enrollment at UMW. Providing this information will aid University officials in assigning appropriate advisors and in helping students select courses that meet requirements for their education goal, make steady academic progress, and ultimately graduate in the shortest time possible.

Students are responsible for notifying the University regarding changes to their address and telephone information. Contact the Registrar’s Office, (406) 683-7371.

Enrollment & Attendance (UMW Policy 203.1)
Students at Montana Western enroll on a semester basis and are expected to register (including paying tuition and fees) prior to the start of the term for all classes they plan to complete during that term and, once registered, to actively participate in learning activities associated with courses in which they are enrolled.

Regular class attendance is critical to student success. Faculty determine requirements for satisfactory completion of classes they teach and usually specify attendance policies at the start of each course. Students are responsible for knowing attendance and course completion requirements for each class in which they are officially enrolled. Students are encouraged to communicate regularly with instructors concerning academic progress and attendance. Students who register for a course and fail to attend will receive an “F” as a final grade. Students must officially drop the course(s) or withdraw from UMW on or before the published deadline for these actions to avoid receiving failing grades in these situations.

Students who register for a course but fail to attend the first two class sessions may be required by the instructor to drop the course or receive an “F”. This policy allows faculty to determine class vacancies early in a course, and add other students into classes that otherwise appear to be filled. Non-attending students who are asked to drop/withdraw are responsible for completing the paperwork necessary to officially drop the class before the published deadline. Non-attending students who fail to file the necessary paperwork to drop a class will receive an “F” as a final grade.

Students are encouraged to communicate regularly with instructors concerning academic progress and attendance. Students who know they will be absent from a class should notify the instructor in advance.

Student Records & Release of Student Information
UMW maintains the following records pertaining to student enrollment:

Admissions Office—temporarily maintains admission-related records submitted by prospective students, including high school transcripts and/or high school equivalency (GED) reports, student immunization records, assessment test score reports, college transfer transcripts, application forms, financial statements of international students, and copies of I-20 forms.

Records of admitted students are transferred to the Registrar’s Office during the student’s first term of enrollment. These records (proof of immunization, high school/college transcripts, ACT/SAT scores) become part of the student’s enrollment file maintained in the Registrar’s Office.

Business Services—maintains records of all charges assessed, amounts paid by and owed to UMW by students and former students, as well as information that indicates the authority by which Montana Western is able to charge for educational services rendered. Student work-study payroll records are filed in Business Services. Information on the student insurance program is available at Business Services and the Student Affairs Office.

Faculty Offices—faculty maintain records, subject to statute of limitations governing such records, relating to individual student achievement in courses they teach as well as copies of course syllabi and outlines of course requirements and expectations. Advisee records are also kept in faculty offices.

Financial Aid Office—maintains records submitted by students, prospective students, and parents of students/prospective students who apply to Montana Western for federal, state, local and institutional financial aid, and Veterans benefits. Copies of federal, state, Montana University System, and UMW policies and regulations governing the awarding and administration of financial aid programs are available for review by interested parties.

Registrar’s Office—maintains permanent academic records, files of academic-related information on each student, and copies of the information students submit as part of their initial application for admission to UMW, including proof of immunization. A complete text of the Family Educational Rights and Privacy Act of 1974 as Amended (FERPA) is available at the Registrar’s Office. Montana residency records
and publications, NAIA and NIRA athletic eligibility information for Montana Western’s athletic team members, and summary enrollment information is also on file.

**Student Affairs Office**--maintains housing records of students living on campus, records pertaining to special needs students (students with disabilities), records of student disciplinary matters, and records of campus counseling matters. Information on the student insurance program is available here.

**Traffic Control Office**-- maintains records pertaining to authorized campus parking and parking violations, and is responsible for ensuring that all federal, state, municipal, and UMW parking regulations are met.

**Third Party Requests for Enrollment Verification**
The University of Montana Western (Federal School Code: 002537) has contracted with the National Student Clearinghouse (NCS) to provide enrollment verification information of current and former UMWW students. Hundreds of colleges and universities across the United States have signed agreements with NSC to provide these services.

Requests for current and former UMWW student enrollment verification information should be directed to the National Student Clearinghouse (see contact information below). This agency will provide the information needed. All third-party requests for enrollment verification information sent directly to UMWW will be forwarded to the Clearinghouse. Student enrollment verifications may be written, faxed, e-mailed, called in, or mailed. Requests should include adequate student identification as well as specific time periods for which attendance/enrollment information is desired. Providing specific information will facilitate the enrollment verification process.

The Clearinghouse will only verify whether a specific student is or was enrolled. NCS is not able to provide student grade or grade point information. Also, the Clearinghouse is unable to verify enrollment of students who ask to have directory information blocked, according to the Family Educational Rights & Privacy Act (FERPA). In such cases, the student must provide Montana Western with a specific written request for information release.

Students and/or third parties should direct questions regarding enrollment verification to the UMWW Registrar’s Office, (406) 683-7371.

**National Student Clearinghouse:**

Address: 2191 Fox Mill Road, Suite 300
Herndon VA 20171-3019
Phone: (703) 742-4200, 8:30 am-5:15 pm EST
Fax: (703) 742-4239
Website: www.studentclearinghouse.org
E-mail: enrollmentverify@studentclearinghouse.org

**FERPA--Records Release & the Family Educational Rights & Privacy Act of 1974**

Under the provisions of the Family Educational Rights and Privacy Act of 1974 as Amended, all student records and information, except for certain designated “directory information” and the award of certain honors, are to be regarded as confidential and access restricted to the student and other authorized personnel. Confidential information may be released to others only by written permission of the person concerned or by subpoena issued by a court or tribunal of competent jurisdiction. The student must be notified of any release of information by subpoena.

A student’s academic record or transcript may be released only when requested by the student in writing, or by applicable subpoena issued by a court or other tribunal of competent jurisdiction.

The law allows release of certain personally identifiable student information, known as “directory information,” to third parties without student consent. However, a student may request that all of the items identified as directory or public information, with the exception of name, be withheld and considered restricted information by filing a written request at the UMWW Registrar’s Office. A request for nondisclosure will be honored by the institution and remain active on a semester-by-semester basis. Students must notify the institution of their desire for continued directory records restriction. The following items of student information are considered “directory information” and may be released to third parties:

- name, campus address, home and permanent address, telephone, email address.
- age, date, place of birth.
- name and address of parents.
- major field of study, including department or program in which the student is enrolled.
- classification as a freshman, sophomore, junior, senior, or graduate student, etc.
- participation in officially recognized activities and sports.
- high schools attended, high school graduation date.
- weight, height, and pictures of athletic team members.
- class schedules, dates of attendance and graduation, degrees received.
- honors and awards received.
- the most recent educational institution attended by the student.
- individual student class schedules.
- photographs of students.

Release of directory information is handled with discretion. Use of this information for commercial solicitation purposes will generally be denied, with the exception under the Solomon Amendment that institutions are required to provide directory information to United States Military recruiting offices. Fees may be charged for gathering and printing student directory information.

**Exceptions to FERPA**
The campus may release confidential student educational information and directory information to the following individuals or agencies without written consent:

1. UMWW and other Montana University System personnel for legitimate educational purposes and to the extent required in the ordinary performance of their duties.
2. Authorized representatives of the Comptroller General of the United States, the Secretary of the Department of Education, an administrative head of an educational agency, or state educational authorities having access to student or other records that may be necessary in connection with the audit and evaluation of federally-supported education programs (provided that a collection of personally identifiable data is specifically authorized by federal law, any data collected by such officials with respect to individual students shall not include information, including Social Security Numbers, that would permit the personal identification of such students or their parents after the data so obtained has been collected).
3. In compliance with a judicial order or any lawfully issued subpoena, upon condition that the student is notified in advance of compliance.
4. In connection with a student’s application for or receipt of financial aid.

**The Clery Act**
The Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act requires higher education institutions to give timely warnings of crimes that represent a threat to the safety of students or employees, make public their campus security policies, and collect, report, and disseminate crime data to the campus community and to the U.S. Department of Education. The act is intended to provide students and their families, as higher education consumers, with accurate, complete, and timely information about safety on campus to allow them to make informed decisions. Crime data for Montana Western is posted on the university website and is available from the Student Affairs Office. In addition, the Student Affairs Office posts throughout campus timely warnings of crimes.
Student Services & Programs

Lucy Carson Library &
Swysgood Technology Center
James E. Short Center
(406) 683-7541

The mission of the Lucy Carson Library (LCL) and Swysgood Technology Center (STC) is to help in the creation of an information and technology literate lifelong learner and to positively impact the way that faculty teach, students learn, and staff work.

Information is no longer limited to library shelves nor to specific dates and times of access. Helping people connect with and utilize this information and technology is the goal of the LCL and STC staff.

The facilities offer:
- an excellent balance between group and quiet study spaces.
- comfortable furniture.
- food and drink friendly environments with a coffee shop and eatery on site.
- wireless Internet accessibility.
- digital and print information resources in all curricular areas.
- collection of circulating technology tools.
- six computer labs.
- on- and off-campus accessibility of these resources.
- digital services such as interlibrary loan.
- a library web portal.
- information and technology instruction.
- photocopy and media assistance.

Students’ intellectual welfare is the focus, providing the latest technology, media, and duplication services.

The fully automated library collection of print and non-print resources including books, periodicals, and electronic materials fulfills the information needs of most patrons. An interlibrary loan department assists in locating information not available at the library. The library has been designated as Montana’s NASA Teacher Resource Center, and K-12 Educational Media Center by the Montana Office of Public Instruction.

Library and technology instruction is available for individuals, small groups, or classes. The staff tailors presentations to faculty or student requests, including in-classroom instruction for faculty while they are off campus.

School of Outreach
Main Hall 115
(406) 683-7537
Toll Free (866) 799-9140

The School of Outreach embodies Montana Western’s mission of serving citizens of all ages with academic, community-service, and lifelong-learning programs. Outreach programs extend beyond traditional University course offerings to provide students with more choices, to promote professional development, and to serve community interests. Credit, non-credit, grant-funded, self-supporting, and sponsored programs are offered at locations on- and off-campus, as well as sites linked by technology. Outreach programs use alternative schedules that allow students to take classes at night, on weekends, or during Summer Session. The School of Outreach also offers all of the UMW online courses.

The School of Outreach issues a bulletin of course offerings three times each year—in July, December, and April, corresponding with the Fall, Spring, and Summer Sessions, respectively. The Outreach Bulletin is supplemental to the campus Schedule of Classes and is of interest to students seeking to accelerate their studies, enroll in an online course, pursue a professional development opportunity, or just have fun.

Honors Program
Dr. Eric Dyreson, Honors Program Chair
(406) 683-7275

The UMW Honors Program gives a limited number of curious and motivated students the opportunity to seek greater challenge through Honors Seminars. These are small, interactive, interdisciplinary classes, each based on a common theme, rich in reading, writing, and independent projects. The 15 or fewer students in each seminar get to know one another well, engage in service learning activities, and present their work to the seminar as well as to other audiences.

Each seminar is designed to serve as a substitute for General Education or Major classes so that students are not slowed in their progress toward graduation. To graduate with an Honors endorsement, students take at least four seminars, with at least two seminars at the 300- or 400-level. Students submit an Application to Graduate With Honors Endorsement form (search for “Printable Forms” on the UMW website) with their graduation application materials when applying to graduate from Montana Western.

Honors application forms are available at http://www.umwestern.edu/shares/honors, click on “Contact Us.”

Return completed Honors applications to: The University of Montana Western, Campus Box 85, 710 S Atlantic, Dillon MT 59725-3598.
Services for Student Success

Academic Advising
Advising Center
Main Hall 214
(406) 683-7050, 683-7049

Academic advising is an important service provided to UMW students. To help ensure that students are making satisfactory progress toward meeting the requirements for their academic program of study, all students should meet regularly with their advisor. All students at Montana Western are assigned a faculty advisor in their area of study once a major or program of study is declared. Undeclared majors are assigned to Advising Center advisors until a major is declared. However, it is important for a timely graduation and to ensure that program of study requirements are being met that students officially declare a major with the Advising Center as soon as they have decided on a program of study.

The Advising Center assists students who wish to discuss their program of study or who need to be assigned a faculty advisor. All UMW students are encouraged to meet with their advisor to review their program of study. Students may contact the Advising Center with questions related to academic advising, student forms, and other general information.

Career Services
Lucy Carson Library 006
(406) 683-7143
umwcareers@umwestern.edu

Career Services offers a wide array of services designed to help students and alumni find satisfying employment in today’s ever-changing environment. Career Services has a number of resources to help students who have questions about a chosen major (or haven’t yet chosen a major) to understand their opportunities and options as they plan their career.

Career Services maintains current information about campus work opportunities as well as jobs in the community, internship opportunities, and career options after graduation. The Coordinator of Career Services can assist students with setting up a placement file to assist in job and internship placement before and after graduation. Workshops on resume writing, interview skills, and cover letters are offered by Career Services in coordination with the UMW Learning Center.

Career Services offers assistance to all UMW graduates by providing valuable career planning and job searching skills, cover letter and resume writing samples, and interviewing best practices. The office sponsors a Career Week each spring and fall as a way for UMW students to familiarize themselves with a variety of professionals and professions. Career Services is located inside the Learning Center in the basement of the Lucy Carson Library. Contact Career Services for more information.

Disability Services
Student Affairs, Davis Hall
(406) 683-7565

Montana Western is committed to achieving equal educational opportunity and full participation for persons with disabilities. It is UMW’s policy that no qualified person be excluded from participating in, be denied the benefits of, or otherwise be subjected to discrimination with regard to any University program, activity, internship, practicum, or class.

A student with a disability must give initial notification to the Student Affairs Office and the Dean of Students that he/she has a physical, psychological, and/or learning disability. The student must provide appropriate documentation that describes the qualifying disability, the extent of that disability, and information on how the effects of the disability might be overcome through reasonable accommodations. If the student does not make this notification and provide the appropriate documentation, UMW does not have a legal obligation to provide accommodations.

It is Montana Western’s goal to meet the needs of each student with a disability. Upon receipt of disability documentation, the Dean of Students or her representative will contact the student to arrange a meeting to discuss reasonable accommodations. The student is welcome to bring a parent, guardian, significant other, or assistant to the meeting. The meeting is designed to help the student be successful in his/her course work at UMW. The Dean of Students will help guide the student in making decisions regarding classes and needed accommodations. Accommodations may include services such as note-taking, books on audio CD, proctored and/or orally-delivered tests, extended testing periods, and dictation services.

Housing and dining accommodations, access to buildings, and student support groups are also topics discussed in the meeting with the Dean. Accommodations must be reasonable as to the extent of the law, including ADA and Section 504 provisions. When accommodations cannot be agreed upon between faculty, student, and administration, the Student Affairs Office will seek advice, input, and/or mediation from the University of Montana-Missoula campus.

Learning Center
Lucy Carson Library 006
(406) 683-7200

The Learning Center offers peer tutoring for all UMW students. Peer tutoring services are available as appointments or on a walk-in basis. Peer tutors are available to assist students in a one-on-one setting or as leaders of study groups. Peer tutoring is offered in all the content areas and tutors come highly recommended by faculty. The Learning Center aids students in organizing and locating resources, improving writing and editing skills, formatting papers, practicing oral presentations or note taking skills, and learning to correctly cite reference sources. The Learning Center provides a number of workshops that are accessible as computer modules in its computer lab.

All UMW students are encouraged to stop by the Learning Center at the beginning of each block to meet the tutors, obtain a schedule, and to learn about study table opportunities. The Learning Center promotes a collaborative learning environment with computers, a reference library, knowledgeable tutors and a welcoming atmosphere. Call for more information or to make an appointment.

TRIO Student Support Services
Main Hall 215
(406) 683-7322

TRIO Student Support Services (TRIO SSS) offers academic advising, tutoring, counseling services, and some financial aid to assist eligible students enrolled at UMW who become participants in the program. Academic advising includes help with campus academic procedures, referrals to appropriate offices, career guidance, and information about financial aid. Assistance is offered in a friendly office environment where students are encouraged to achieve academic success. Applications are available in the TRIO SSS Office.

Funded by a U.S. Department of Education grant, TRIO SSS serves approximately 160 students at UMW. Students with an academic need are eligible for TRIO SSS if they meet one or sometimes two of the following criteria:
1. Family income meets income guidelines.
2. Neither of the student’s parents or legal guardians has completed a four-year college degree.
3. Student has a documented disability.
The University of Montana Western Catalog 2010-2011

Financial Aid

James E. Short Center
710 S Atlantic
Dillon, MT 59725-3598
(406) 683-7511

The Financial Aid Office ensures that Montana Western students have the financial support necessary within the boundaries of state and federal regulations to achieve their academic goals. The UMW Financial Aid Office follows the pre-established federal guidelines that govern all financial aid transactions for institutions of higher education. Students should make sure that they understand all requirements for residency.

Students at Montana Western enroll on a semester basis and are expected to register (including paying tuition and fees) prior to the start of the term for all classes they plan to complete during that term and, once registered, to actively participate in learning activities associated with courses in which they are enrolled.

For financial aid purposes, the following definitions (pages 31-33) apply:

**Attendance or Attending**—Registering for and actively participating in learning/instruction activities associated with a class or classes. Only students who start with and maintain full-time enrollment status throughout the term are eligible for intercollegiate athletic certification and participation.

**Enrollment Status (Student)**—A student semester designation that is determined based on weeks of actual attendance and credit load. There are three (3) enrollment status designations: full-time, part-term, and part-time.

**Full-Time Student**—For financial aid purposes, a student officially registered for a minimum of 12 semester credits of courses that require a minimum of 15 weeks of class participation during a regular semester.

**Part-Term Student**—A student officially registered for a minimum of 12 semester credits of courses that require less than 15 weeks of class participation during a regular semester. Financial aid is pro-rated for part-term students; part-term students are not eligible for intercollegiate athletics.

**Part-Time Student**—A student registered for less than 12 credits during a regular semester. Financial aid is pro-rated for part-time students; part-time students are not eligible for intercollegiate athletics.

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**Student Financial Aid Programs**

**Grants**

**Federal Pell Grant**
Federal Pell Grants are awarded to undergraduate students who have not earned a bachelor’s or professional degree. Pell eligibility is determined by a formula developed by the U.S. Congress and is applied consistently to all applicants using the information reported in the Free Application for Federal Student Aid (FAFSA).

**ACG Grant**
An Academic Competitiveness Grant will provide up to $750 for the first year of undergraduate study and up to $1,300 for the second year of undergraduate study to full-time students who are U.S. citizens, eligible for a Federal Pell Grant, and who had successfully completed a rigorous high school program, as determined by the state or local education agency and recognized by the Secretary of Education. UMW determines eligibility based upon FAFSA and admissions information. Academic progress standards exist for receipt of the grant. This will be the last year for this grant.

**National SMART Grant**
The National Science and Mathematics Access to Retain Talent Grant (National SMART Grant) is available during the third and fourth years of undergraduate study to full-time students who are eligible for the Federal Pell Grant and who are majoring in physical, life, or computer sciences, mathematics, technology, or engineering, or in a foreign language determined critical to national security. The Department of Education specifies CIP codes (degree codes) that are to be funded, without flexibility or consideration for alternate areas of study. UMW determines eligibility based upon FAFSA and Registrar's information. Academic progress standards exist for grant eligibility. This will be the last year for this grant.

**Federal Supplemental Education Opportunity Grant (FSEOG)**
This grant is available to a limited number of undergraduate students with exceptional financial need. Priority is given to students who receive full Pell Grants.

**Baker/MTAP Grant, Access Grant**
To qualify for these grants, a student must be a Montana resident, eligible for financial aid, enrolled as a full-time undergraduate student, and have substantial financial need. There is also a work requirement for students receiving this grant. They must have earnings from work for the previous tax year in accordance with a formula developed by the State of Montana. Priority is given to students who are just beyond Pell Grant eligibility according to the aforementioned formula.

**Montana Higher Education Grant**
Montana Higher Education Grant is a state-provided funding source awarded to full-time Montana residents who are also Pell Grant recipients and first-time degree seeking students (undergraduate students). Students must have demonstrated need to receive the fund after Pell Grant and resources. Priority is given to the lowest EFC students and funds are awarded on a first-come, first served basis.

**Federal TEACH Grant (Loan)**
The Federal Teacher Education Assistance for College & Higher Education (TEACH) Grant Program is for upper division students accepted into the UMW Teacher Education Program (TEP). Available to full-time Junior/Senior students in the Education major, the program provides grants of up to $4,000 per year to students who intend to teach in a public or private elementary or secondary school that serves students from low-income families in a teacher shortage subject. If these terms are not met, the TEACH grant becomes an unsubsidized loan with retroactive interest.
Loans

Federal Perkins Loan
A Federal Perkins Loan is a low-interest (5%) loan for students with financial need. The school is the lender. A typical award at UMW is $1,800/year. Repayment of the loan is deferred while the borrower is enrolled at least half-time in an approved institution of higher education. Priority is given to full-time students. Interest begins to accrue and repayment starts nine months after the borrower ceases to be enrolled at least half-time. Repayment may be extended over a maximum of 10 years. Under certain circumstances, the Perkins Loan can be cancelled. Information regarding loan cancellation and deferment is available in the Financial Aid Office.

Federal Direct Loan
Federal Direct Loans are low-interest loans (variable interest annually for borrowers) offered by the Department of Education to students attending school at least half-time. Students must complete the FAFSA form and apply through the Financial Aid Office, and must also sign a promissory note to receive this loan.

Repayment of the Direct Loan begins six months after the student graduates, leaves school, or drops below half-time. Students have up to 10 years to repay.

Direct Loans are either subsidized or unsubsidized, and a student may receive both types for the same enrollment period. Unsubsidized Direct Loans are not awarded on the basis of financial need. The student is responsible for the interest from the time the loan is fully disbursed. A student can request that the interest be accrued and capitalized (that is, the interest will be added to the principal of the loan). However, it is recommended that students pay interest quarterly to lower aggregate debt.

A student can request that the interest be accrued and capitalized (that is, the interest will be added to the principal of the loan). However, it is recommended that students pay interest quarterly to lower aggregate debt upon repayment. No principal payments are due during school or deferment periods. A subsidized Direct Loan is awarded on the basis of financial need. The student will not be charged any interest before beginning repayment.

Annual Loan Limits (subject to cost of attendance limits)

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>First year</td>
<td>$3,500; $7,500 for independent students</td>
</tr>
<tr>
<td>Second year</td>
<td>$4,500; $8,500 for independent students</td>
</tr>
<tr>
<td>Third, fourth, fifth year</td>
<td>$5,500; $10,500 for independent students</td>
</tr>
</tbody>
</table>

All students may borrow (subject to cost of attendance) $2,000 per year in additional unsubsidized loans.

Aggregate Loan Limits
Undergraduate $23,000 – 46,000 (varies with dependency status)

Federal Direct PLUS Loan
Federal PLUS Loans are unsubsidized loans made to parents of dependent students. Parents may borrow the cost of attendance less other financial aid. Interest is variable. Federal PLUS borrowers generally must begin repaying both principal and interest within 60 days after the loan is fully disbursed. PLUS Loans are credit contingent. Parents may re-apply with an endorser if denied.

Retention Loan Scholarship
A short-term retention scholarship revolving loan fund was created from federal funds allocated by the Governor to the Montana University System and then allocated to UMW. The fund is to be used to provide educational scholarship loans to selected students. A scholarship loan to a recipient may not exceed $1,000 per school year for an undergraduate student and may not be made to a student for more than six years. A scholarship loan may not exceed the cost of attendance as determined by the UMW Financial Aid Office.

An applicant for a retention scholarship loan must be a resident of Montana, enrolled or eligible for enrollment as a full-time student in a degree program, have a minimum 2.00 GPA (cumulative and/or prior semester), and have an EFC range from $3,500-7,500.

The recipient must at all times continue to be enrolled in at least 12 semester credits and 15 weeks and be in good academic standing at UMW.

Repayment of Short-Term Loans
Repayment is made within 30 days during enrollment at UMW. These funds are for temporary and emergency purposes and repayment is usually made during the semester borrowed. Some of the funds have been established by families and friends as memorials to persons named in the funds. Fund sources include:
- Frank & Catherine Willis Loan Fund
- American Association of University Women, Dillon Branch, Loan Fund
- Art Club Loan Fund
- Butte Rotary Club Loan Fund
- John & Jennie Painter
- B.F. White Memorial
- Bishop Memorial
- Alumni Loan Fund
- Frederick Kress Memorial
- Class of 1922 Loan Fund
- Iva Lee Orr Loan Fund
- Dillon Business & Professional
- Dillon Rotary Club Loan Fund
- Chinoik Loan Fund
- Robert Clark Memorial
- Shakespeare Club Loan Fund
- Samuel Wells Loan Fund
- Pan-Hellenic Loan Fund
- Cap and Gown Loan Fund
- Western Women’s Club Loan Fund
- Porter-Sneed Athletic Loan Fund
- Bernice Gleed Loan Fund
- Iva Estella Miller Loan Fund
- Ira Perkins Loan Fund

Employment Opportunities

The Financial Aid and Career Services Offices provide assistance to regularly enrolled students in obtaining part-time employment during the academic year and full-time employment during the summer and other vacation periods. Earnings from federal and state employment will be counted as additional resources in evaluations for financial aid. Earnings generated after an initial financial aid offer may result in reduction or retraction of financial aid.

Federal and State Work Study
Work Study is a federal or state program that provides opportunities for employment for undergraduate students in need of such earnings to help meet the cost of their education. To be eligible, a student must demonstrate need, be accepted for enrollment or be enrolled as at least a half-time student, have a completed financial aid file, and be making satisfactory academic progress while employed.

Work is generally limited to 10 hours per week while classes are in session. The major portion of the student’s hourly wage under the Work Study program is provided by the federal or state government, with the employer contributing the balance. Hourly pay rates comply with minimum wage laws and vary with the type of work and the student’s experience and capabilities. Employment is generally on campus. Work Study funds are limited and awarded on a first-come, first-served basis.

Full-Time Federal Work Study
Full-time Work Study is a summer program designed to provide student employment during the summer months. It is expected that the earnings from this employment be utilized to offset the next academic year’s educational costs. To be eligible, a student must be accepted for admission or pre-registered for the next academic year, have completed a summer work study application available from the Financial Aid Office, have a completed financial aid file for the next academic year, and have...
documented financial need for the next year. Work Study funds are limited and awarded on a first-come, first-served basis.

**Tuition Waivers**

The Board of Regents of the Montana University System has authorized each unit of the Montana University System to grant waivers of tuition and out-of-state tuition to a limited number of regularly enrolled undergraduate and graduate students who meet prescribed criteria. **Tuition waivers do not waive mandatory fees.**

Tuition waivers may be granted to recognize exceptional accomplishment or to increase accessibility of higher education to those who require financial assistance. Certain students, such as high school honor students, international students, or Native Americans of Montana, may be exempt from paying tuition and out-of-state fees. These fee exemptions are determined by the Financial Aid Office.

Students who receive out-of-state tuition waivers must pay non-resident building fees.

**Dependents of Montana University System Employees Tuition Waiver**
Dependents of a Montana University System employee are eligible for a 50% reduction of residential tuition. The guardian must have completed five years of employment at three-quarter (3/4) time or more without a break in service. Employees utilizing employee tuition waivers are not eligible for a dependent partial tuition waiver. For each qualifying employee, only one dependent may utilize the dependent partial tuition waiver in an academic term.

**Montana University System Honor Scholarship**
This scholarship waives tuition and is awarded to top graduating seniors in Montana by the Board of Regents. To activate this scholarship, a student must submit the form received from the Board of Regents to the UMU Financial Aid Office.

**American Indian Waivers**
Montana Indian students have been granted American Indian Tuition Waivers by the Montana Board of Regents. To qualify, the student must have been a bona fide resident of the State of Montana upon enrolling at UMU, must be one-quarter (1/4) degree of Indian blood documented by a certificate or tribal enrollment card, and have demonstrated financial need.

American Indian Waivers do not waive all fees. The tuition is waived. The American Indian Waiver may not be used with other state fee waivers. All other fees are the student’s responsibility. The tuition waiver will continue as long as the student maintains satisfactory academic progress according to the standards provided in the Satisfactory Progress Policy, available at the Financial Aid Office.

**Senior Citizen Tuition Waiver**
To be eligible for the Senior Citizen Tuition Waiver, individuals must be 65 years of age or older, provide a copy of a driver’s license or other proof of age when registering, and have been bona fide residents of Montana for at least one year prior to enrollment at UMU.

**University of Montana Employees Tuition Waiver**
University of Montana employees must be in-state residents employed at least three-quarter (3/4) time on the date of registration and for the entire semester. Employees receiving a tuition waiver must have approval of their supervisor and the department head. A maximum of eight credits may be waived. Employees may not take more than one “block course” per semester.

**Veterans Tuition Waiver**
Certain honorably discharged veterans are entitled to a Veterans Tuition Waiver. Those using this tuition waiver program must pay their fees before they will be officially registered. To be eligible for the tuition waiver program, veterans must file a completed tuition waiver form, a certified copy of the DD214 form, and a letter from the Veterans Administration stating that benefits have expired to the Veterans Affairs Coordinator in the Financial Aid Office; must be a bona fide Montana resident for at least one year prior to enrollment at UMU; and must have served between the dates of 12/7/41 to 12/31/46 World War II; 6/22/50 to 1/31/55 Korea; 1/1/64 to 5/7/75 Viet Nam, and/or on location during the Lebanon, Grenada-Panama, Persian Gulf, Iraq, or Afghanistan Conflicts. Some qualifying dates for recent conflicts are not listed and are evaluated on a case-by-case basis in accordance with Board of Regents policy.

**Other Tuition Waivers**
Several other tuition waivers are available for war orphans, dependents of prisoners of war, and surviving spouse or children of any Montana firefighter or peace officer killed in the line of duty. Contact the Financial Aid Office for details.

**Scholarships**

**Western Undergraduate Exchange (WUE)**
Students from Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, North Dakota, Oregon, South Dakota, Utah, Washington, and Wyoming may be eligible for the Western Undergraduate Exchange (WUE) program. Upon notification of eligibility, these students pay one and one-half (1 1/2) times the tuition for resident students plus all other fees applicable to all students.

Contact Admissions for more information on WUE Scholarships. Students must maintain satisfactory academic progress once awarded a WUE Scholarship.

**Scholarship Recipients**
Many scholarship recipients are required to maintain higher scholarship standards than described in this policy. Such standards are often outlined in a notification letter sent to the student. Students who feel they may not be able to maintain minimum acceptable standards should contact the Financial Aid Office.

**Job Service**
Some students may qualify for assistance with tuition and fees via their local Job Service. Contact the Dillon Job Service for more information.

**Social Security**
Students eligible for Social Security Educational Benefits should contact their local Social Security Office for more information.

**State Vocational & Rehabilitation Service**
Certain disabled or handicapped persons may qualify for educational assistance through the Montana Department of Public Health & Human Services. Contact that office for more information.

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Veterans Benefits and Tuition Assistance

The Veterans Coordinator located in the UMW Financial Aid Office is available to assist veterans and their dependents with procedures for enrolling at UMW and applying for educational benefits. The Veterans Coordinator acts as an intermediary between veterans and the Veterans Administration Office at Fort Harrison, Montana, and between veterans and the Department of Veterans Affairs Office in St. Louis, Missouri.

All veterans and eligible persons receiving educational benefits under Veterans Administration programs are required by law to report promptly to the Veterans Administration any changes that may affect the amount of money being received. These changes include dropping courses, withdrawing from school, not attending classes, changes in marital status, and added dependents.

To be considered full-time, undergraduate students must carry 12 credits, or 16 block credits, during each of Fall and Spring Semesters. As the criteria for Summer Session differs, veterans should contact the UMW Veterans Coordinator for more information.

The following chart indicates the minimum credit hours for which undergraduate veterans must be registered to receive benefits:

<table>
<thead>
<tr>
<th>Benefits</th>
<th>Credits</th>
<th>Blocks*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full</td>
<td>12 or more</td>
<td>4</td>
</tr>
<tr>
<td>Three-Quarter</td>
<td>9, 10, 11</td>
<td>3</td>
</tr>
<tr>
<td>One-Half</td>
<td>6, 7, 8</td>
<td>2</td>
</tr>
<tr>
<td>Fees Only</td>
<td>Less than 6</td>
<td>1</td>
</tr>
</tbody>
</table>

*Contact the Veterans Coordinator in the Financial Aid Office for explanation of Block certifications.

Financial Aid Policies

Satisfactory Academic Progress

In order to receive financial aid, a student must be in an eligible program. An eligible program is a course of study that leads to a certificate, associate, bachelor, or higher degree. Students receiving financial aid are required to maintain satisfactory academic progress. A full-time undergraduate student must satisfactorily complete a minimum of 12 credits and 15 weeks per semester. Complete information is available in the Financial Aid Office. Incomplete and/or Audit grades do not count toward academic progress.

Students receiving financial aid must complete their degree programs within a reasonable period of time as established by the University. Students may receive financial assistance only as long as the cumulative number of attempted credits is less than 150 percent of the number required for the completion of the bachelor’s degree (185 credits for most programs). Students who want consideration for assistance beyond the 185 credits must submit a petition to the Financial Aid Office.

Changes in Satisfactory Progress Standards

Exceptions or amendments to any of the specific provisions regarding Satisfactory Academic Progress Standards may be made at any time, without publication, due to changes in federal, state, and/or institutional regulations and policies. Questions concerning this policy should be addressed to the Financial Aid Office.

Appeal of Financial Aid Suspension

Students may appeal in writing by submitting a Financial Aid Appeals Form available from the Financial Aid Office. The Financial Aid Appeals Committee meets as needed and reviews each case. It is the student’s responsibility to know if their grade reports, when compared to the Satisfactory Academic Progress Standards, will cause immediate suspension of their financial aid. It is not the responsibility of the Financial Aid Office to notify the students. It is also the student’s responsibility to notify the Financial Aid Office when reinstatement conditions have been met or to initiate an appeal.

Reinstatement of Financial Aid

Students whose suspension time has elapsed or who have successfully corrected the deficiency must notify the Financial Aid Office and submit a grade transcript for review. Reinstatement of financial aid is subject to funds available at the time the completed file is reviewed. A subsequent appeal may be required.

Transfer Students

Students transferring to UMW from another institution with a GPA less than 2.0 and who are not eligible to receive aid at that institution due to failure to maintain satisfactory progress must submit a letter of appeal to the Financial Aid Appeals Committee, c/o the UMW Financial Aid Office, for approval to receive financial aid.

Non-Degree Students

A non-degree student, by definition, is not considered to be in a degree program and is therefore not eligible for financial aid. Students enrolled for educator licensure or re-licensure may be eligible for aid.

Student Eligibility Review

Western reserves the right to review and cancel awards at any time due to changes in financial or academic status, or because of the recipient’s failure to observe reasonable standards of citizenship. All Perkins Loans, Supplemental Education Opportunity Grants, and Work Study employment opportunities are awarded subject to Congressional action and the availability of federal funds.

Transfer of Financial Aid to Another Institution

Financial awards other than Pell Grants are not transferable from one institution to another. To add another institution to the Student Aid Report, call 800-4FED-AID (800-433-3243), or add the school online at www.FAFSA.ed.gov.
Return of Title IV Funds/Institutional Refund Policy
This policy applies to students who withdraw, cease attending, or are expelled. Contact the Financial Aid Office for current policy information.

Refunds for these students are determined according to the following policy:
1. The term “Title IV Funds” refers to the federal financial aid programs authorized under the Higher Education Act of 1965 (as amended) and includes the following programs: unsubsidized FFEL loans, subsidized FFEL loans, Federal Perkins Loans, Federal Pell Grants, ACG/SMART Grants, and Federal SEOG.
2. For Financial Aid purposes, a student’s withdrawal date is:
   a. the date the student began the institution’s withdrawal process or officially notified the institution of intent to withdraw; or
   b. the midpoint of the period for a student who leaves without notifying the institution, or earns zero grade points; or
   c. the student’s last date of attendance at a documented academically-related activity.

Return of funds and/or pro-ration of aid will be calculated for all students who withdraw or withdraw from an individual block without attending.

In accordance with federal regulations, when financial aid is involved, returned funds are allocated in the following order:
1. Unsubsidized FFEL loans
2. Subsidized FFEL loans
3. Federal Perkins Loans
4. Federal Pell Grants
5. Federal SEOG
6. Other Title IV assistance
7. Other federal sources of aid
8. Other state, private, and institutional aid
9. The student

The student’s responsibilities in regard to the return of Title IV funds include returning to the Title IV program any funds that were disbursed directly to the student and for which the student was determined to be ineligible via the Return of Title IV Funds calculation, including any financial aid refunds the student may have received.

Students who do not begin attendance in all block credits will be subject to a reduction of Pell Grant, ACG, and SMART funds, if applicable.

For more information about institutional refund of fees for withdrawal, see Tuition & Fees Information section of this Catalog.

Enrollment & Graduation
Registrar’s Office
James E. Short Center
710 S Atlantic
Dillon MT 59725-3598
(406) 683-7371

The Office of the Registrar & Institutional Research provides enrollment and student records services for the UMW community. In addition, the department serves as a major provider of current and historical institutional enrollment data that is used by various constituencies to determine effectiveness of University operations and to assist with organizational planning and advancement.

In fulfilling its mission, the department helps to further the institutional strategic plan by continuously striving for excellence, improving responsiveness to the needs of campus and community constituents, enhancing Montana Western’s ability to assess student success, and assuring institutional accountability.

Registration
To participate in UMW’s learning/instructional activities, receive university credit for classes completed, and earn grades, eligible individuals must officially enroll in classes and pay all required expenses at the start of a term/semester and within deadlines outlined in the UMW Academic Calendar. Current students will find registration information on the University’s website and in printed class schedules distributed prior to the start of registration activities. Registration-related information is normally given to new students upon notification of acceptance for admission to Montana Western.

Montana Western operates on a semester calendar. Students are expected to register prior to the start of a term for all classes they plan to take that term. Exceptions (late adds) may be approved but only in instances where students verify that extenuating circumstances prevented them from registering for all classes before the start of the term. Students may not register for one block class at a time.

Who May Register
• Current students in “good” academic standing.
• Students new to UMW who have satisfactorily completed the UMW admissions procedure.
• Former/previous students who have been officially readmitted.
• Part-time, evening, weekend, and off-campus students who have completed the appropriate Application/Registration forms and who are otherwise eligible to register.

Registration procedures vary slightly depending upon:
• the term of enrollment.
• status as a current or new student.
• whether registration is for day, evening, weekend, on-campus, off-campus, or internet classes.
• the number of classes/credits attempted.
• whether the prospective enrollee is pursuing completion of a degree or formal program of study at UMW.

See Student Rights & Responsibilities section of this Catalog. UMW Policy 203.1 Student Enrollment & Attendance is available at http://hal.umwestern.edu/campusinfo/policymanual/policies/203.1_ StudentEnrollment_Attendance_Policy.pdf.
Students are encouraged to check their personal information on DAWGS regularly to assure accuracy. Information available to students via DAWGS includes:

- Final grades for a term or block.
- Transcript information.
- Mailing and billing address information.
- Student e-mail address(es) on file.
- Emergency contacts on file.
- View "holds" (if any).
- Enrollment verification self-service.
- Registration and class schedule change information (students can add or drop classes via DAWGS prior to the start of a term).
- Current student class schedule details.
- Account/billing information.
- Access to course descriptions.
- Current and future term course offerings.

Students access DAWGS account information by following the instructions below. DAWGS works best with Internet Explorer.

1. Click "Login To Secure Area".
2. Enter Password, User ID (Student ID number) and PIN (initially the student’s birth date in “mmddyy” format; example: if DOB is June 7, 1972, PIN is 060772). The system will prompt first-time DAWGS users to change their PIN for security purposes and require them to enter an “alternate security access” question & answer in case they forget their new PIN number.
3. Select Menu items as needed.
4. Exit the system and close the browser to prevent unauthorized third-party access to confidential account information in DAWGS. UMW does all it can to secure its computer network and systems from unauthorized access. However, the protection of the systems can be compromised if people do not protect their ID and password. In an environment where transactions are processed, it is imperative that the integrity of the data is protected by ensuring that IDs and passwords are secure. This is the responsibility of all users of the system. Identity theft is a serious crime and should be reported to appropriate on- and off-campus authorities: Federal Trade Commission at http://www.consumer.gov/idtheft, or the UMW Dean of Students or Director of Information & Telecommunications Services.

Specific instructions for using the registration and add/drop features in DAWGS are included in printed class schedules and on the Registration Information pages of the UMW website. Contact the Registrar’s Office with questions or problems; please be ready to explain problems or quote “error messages”.

**Registration Procedures**

*(Admission to the University is required prior to enrollment and/or attendance.)*

**Current Students in Good Academic Standing**

1. Contact an advisor or the Advising Office to discuss academic goals, to develop a class schedule for the coming term, and to pick up term-specific alternate personal identification number (alternate PIN).
2. Access DAWGS to select classes or submit completed, advisor-approved registration form to the Registrar’s Office.
3. Pay (or make arrangements to pay) all enrollment-related expenses and finalize the registration at Business Services.

Registration must be completed at the beginning of the appropriate term. Class schedules of non-paying registrants will be cancelled; however, this does not automatically eliminate all charges. Review the Academic Calendar carefully regarding important enrollment-related dates and deadlines.

**Students New to Western**

All first-time enrollees at UMW who plan to earn a degree or complete a program must complete the admissions application procedure and be formally accepted for admission prior to attempting to enroll.

1. Contact an advisor or the Advising Office to discuss education goals, develop a class schedule for the coming term, and obtain assigned term-specific alternate PIN.
2. Access DAWGS to select classes, or submit completed, advisor-approved registration form to the Registrar’s Office.

Registration must be completed at the beginning of the appropriate term. Class schedules of non-paying registrants will be cancelled; however, this does not automatically eliminate all charges. Review the Academic Calendar carefully regarding deadlines. All new students are strongly encouraged to attend Orientation sessions scheduled at the beginning of a term. Contact Admissions for Orientation information, (406) 683-7331.

**Part-Time Evening, Weekend, and Off-Campus Students**

All part-time, evening, weekend, and off-campus students should complete the admissions application procedure and be formally accepted for admission prior to attempting to enroll.

1. Contact an advisor or the School of Outreach to discuss enrollment, goals, registration, and fee payment options.
that have not yet started. No enrollments will be accepted after the published deadline to add for a term or session. An individual “block” is not considered a “term”. Procedures for registering after the start of a term are outlined below.

1. Contact an advisor to discuss academic goals and to develop a class schedule for the coming term.

2. Submit completed, advisor-approved Registration form to the Registrar’s Office; all course instructors must approve late enrollment.

3. Pay (or make arrangements to pay) all enrollment-related expenses (including late fees) at Business Services immediately after submitting the Registration form to the Registrar’s Office, and finalize the registration at Business Services.

**Course Schedule Changes**

**Add Courses, Drop Courses, & Withdraw from the University**

Students must officially register, add or drop a course(s), or withdraw from all courses for a term. Course schedule changes must be completed in a timely fashion and according to procedures outlined below. Check records carefully before and after taking action to assure that intended changes are officially recorded. Student course schedule changes are grouped into three different categories depending upon when the change takes place:

1. before classes begin.
2. after classes begin but before the published deadline.
3. after the deadline for such action.

**Add Courses, Drop Courses, or Cancel Registration Before the Semester/Term Begins**

Adding or dropping courses, or withdrawing/canceling one’s enrollment can be done by any of these methods:

1. Access DAWGS and make the needed changes.
2. Submit a completed Student Class Schedule Change form (available at the Registrar’s Office or online) to the Registrar’s Office.
3. Submit a written notification to the Registrar’s Office, including a date, student ID number or Social Security Number, any other pertinent information, and the student’s signature.

Students attempting to add a closed or restricted class must complete a Student Class Schedule Change form or an Add/Drop/Withdrawal form, obtain written approval of the course instructor, and return the completed form to the Registrar’s Office on or by the published deadline for such action.

**Add Courses, Drop Courses, or Withdraw After the Semester/Term Begins**

Once a term begins, all student class schedule changes, including withdrawal from UMW, begin and end at the Registrar’s Office.

1. Complete an Add/Drop/Withdrawal form. Incomplete forms will not be accepted.
2. Obtain the necessary approvals and signatures.
3. Return the completed form to the Registrar’s Office before the published deadline (see Academic Calendar). Save all enrollment-related paperwork for future reference.
4. Pay all expenses related to the action taken.

**Add, Drop, or Withdraw After Published Deadline (Note: One-Year Deadline)**

Students must petition for late add, drop, or withdrawal. Approval of requests occurring after the published deadlines will be decided by the UMW Enrollment & Attendance Committee. To initiate this process:

1. Complete a Policy Waiver Request form and an Add/Drop/Withdrawal form.
2. Obtain the necessary signatures and approvals.
3. Obtain documentation to verify the existence of extenuating circumstances that might have prevented timely action (e.g., illness, family emergency, non-attendance, registration errors, etc.). Only in verifiable and pertinent cases of emergency or extenuating circumstances are post-deadline schedule changes permitted. Reasons for late submission must be fully explained and justification well documented.
4. Return completed forms and documentation to the Registrar’s Office within one year of the end of the term in which affected course enrollment occurred.
5. Pay all expenses related to the action taken.

**Dropping Courses and Record of Enrollment**

Courses are not recorded on a student’s transcript if an official cancellation or course drop occurs on or before the deadline to drop with no record of enrollment. A “W” (Withdrawal) will be recorded in the grade section of a student’s academic transcript for drops or withdrawals that occur after this deadline.

The “No Record of Enrollment” policy/descriptor will be extended in instances where there is an exchange of class:

1. the schedule change is completed within the deadline to add for the applicable block.
2. there is an even exchange – add and drop – of courses and credits (the affected student’s credit load does not change).
3. the add and drop are recorded on the same form and they are for the same block.
4. both schedule changes (add and drop) are approved by all necessary officials – course instructors, student’s advisor.
5. the exchange is appropriate to the student’s program of study.

A “W” (withdrawal) will be recorded on the student’s transcript if the exchange does not satisfy all of these conditions.

**Auditing Classes (AU)**

With the consent of the instructor, students may enroll in classes on a no-credit “Audit” basis. Audit students pay the same fees as students enrolled for credit. Individuals who are auditing a class are not expected to complete coursework assignments or take course exams for that class. Audit course credits may not be used to satisfy degree or program requirements, nor do the credits count as part of the load for financial aid or athletic eligibility purposes. It is the responsibility of the person enrolling for classes to advise the Registrar’s Office before the start of a term of his/her intent to audit a course.

**Changing to Audit (AU) Status**

To change to audit status, students should follow the Add/Drop procedures outlined in this section. In addition to recording the appropriate course information, a student should write the word “Audit” in the applicable “CR” (credits) section of the Add/Drop/Withdrawal form or the Student Schedule Change form. Course instructor approval is required to change enrollment status. Students with questions about changing to/from audit status should contact the Registrar’s Office. Note that there is a mid-term/block deadline for changing to audit status (see Academic Calendar).
Registration Policies

Students are expected to register prior to the start of a semester for all classes they plan to take that term. Students may not register for one block class at a time.

Refunds and Payments Following Class Schedule Changes
All payments and refunds associated with class schedule changes are handled through Business Services. The amount refunded is based on the date a drop or withdrawal is processed and the remaining credit load after processing the changes. For information about refunds, see Tuition & Fees section of this Catalog or contact Business Services, (406) 683-7101.

Maximum Credit Load Policy
(Note: Credit Load policies are currently under review)

Average credit load during a regular semester for full-time students is 16 semester credits, 32 credits per year, or a total of 120 or 128 credits for a four-year curriculum. To be classified as “full-time” a student must maintain active enrollment in at least 12 semester credits of college-level, degree-applicable coursework that requires attendance and/or class participation for all 16 weeks of the semester. Students attempting 12 or more credits but attending/participating less than 16 weeks are considered “part-term” students. Students enrolled in fewer than 12 credits are considered “part-time” students. (See UMW Policy 203.1 Enrollment & Attendance).

Full-time and part-time definitions vary among financial aid funding agencies; consequently, students should not make assumptions regarding definitions for full- or part-time status. Because of the highly intensive nature of instruction, many institutions consider six semester credits a full-time credit load during Summer Session. Students seeking financial aid funding for time-shortened classes should contact the Financial Aid Office regarding specific student credit load definitions and enroll accordingly.

Students must petition the Academic Admissions & Standards Committee to enroll in more than the maximum credit load for a semester or term. Course/Credit Overload Petition forms are available at the Registrar’s Office and online (search for “Printable Forms” on the UMW website). Petitions must be submitted at least one week prior to the start of the term in which the student wishes to attempt the overload, and approval must take place before the deadline to add classes for the term or semester. Incomplete petitions or petitions with inaccurate information will not be processed. No Course/Credit Overload Petition forms for an overload will be accepted for consideration after the deadline to add courses for a semester or term.

Maximum Credit Load: Fall or Spring Semester
Students must petition to enroll in more than 18 semester credits; students with a GPA over 3.00 may register for up to 20 credits during a regular semester without petitioning. No more than five block course credits may be attempted in any single block. Students on Academic Probation must petition to register for more than 16 credits during a regular semester.

Early Admission students are normally limited to a maximum of four semester credits during any time-shortened session or combination of sessions; however, maximum credit load for Early Admission students will be considered on a case-by-case basis.

Maximum Credit Load: Summer Session
Students must petition to enroll in more than 12 credits during Summer Session. Eligible students must petition to attempt more than five semester credits during any of the four-week Summer Session blocks.

Early Admission students are limited to a maximum of four semester credits during any time-shortened session or combination of sessions.

Academic Probation and Suspension

• Academic Probation
Students whose UMW GPA is below a 2.00, and first-term (new) transfer students whose transfer GPA is below 2.00, are placed on Academic Probation status (see GPA definition).

• Continued Academic Probation
Students whose UMW GPA is below a 2.00 and who were on Academic Probation the previous term of attendance, including Summer Session, but who show improvement in their academic performance by earning a 2.00+ term GPA during the next and all subsequent terms of enrollment, are placed on Continued Academic Probation status. Students will remain on Continued Academic Probation status until their UMW Cumulative GPA meets the minimum satisfactory level of 2.00 or higher (see GPA definition).

• Academic Suspension
Students whose UMW GPA is below a 2.00 and who, after attending one or more terms, including Summer Session, on probationary status, fail to earn a minimum 2.00 GPA during the next term of enrollment or attendance are academically suspended (see GPA definition).

Transfer students admitted to UMW on probation (their GPA at any institution previously attended is below a 2.00, or their academic status as indicated on the official transfer transcript is indicated as “on probation” or “academically suspended”) are required to earn a 2.00 GPA in their first term at UMW, including Summer Session, or face immediate academic suspension from UMW.

Upon acceptance for admission to UMW, the Admissions Office will notify transfer students of their academic status.

Academic Probation Policy
Students will be placed on Academic Probation or Continued Academic Probation at the end of any term, including Summer Session, if their UMW GPA drops below 2.00. Students placed on Academic Probation or Continued Academic Probation may enroll at UMW during the next term but are limited to registering for a maximum of 16 credits (any combination of non-block stringer and block classes) during a regular semester or four credits maximum during any Summer block (12 credit maximum). The Academic Admissions & Standards Committee retains the right to further restrict credit maximums if needed (see GPA definition).

Students on Academic Probation or Continued Academic Probation should contact their advisor, the Campus Counseling Center, the Advising Center, and any other UMW official or faculty member for guidance or assistance to improve the student’s academic performance. Contact Student Affairs for services available to UMW students.

“Academic Probation” or “Continued Academic Probation” notations are posted to a student’s permanent UMW academic record. Students who raise their UMW GPA to the minimum 2.00 will be removed from probationary status and, in most cases, enrollment restrictions will be lifted.

Students placed on Academic Probation or Continued Academic Probation will be notified of their status in writing following the end of the term. Notification will explain enrollment limitations and conditions and advise students of consequences if they fail to improve their academic performance during future terms of enrollment.

Students are responsible for notifying the Registrar’s Office of changes to directory information, mailing addresses, phone numbers, etc.

Academic Suspension Policy
Students who start a term on Academic Probation or Continued Academic Probation status will be suspended from UMW at the end of that term, including Summer Session, if they fail to earn a 2.00 term GPA (their UMW GPA at the beginning of the term was below a 2.00; see GPA definition).

A student who has been academically suspended from UMW may not enroll until officially reinstated or readmitted.

Students who are suspended a second or third time for academic reasons may not re-enroll at UMW for a minimum of one full calendar year.
Reinstatement following suspension is not automatic; suspended students must petition for readmission to UMW.

Students may appeal academic suspension immediately upon notification of their status. The Academic Admissions & Standards Committee may approve appeals, but only in cases where unusual or extenuating circumstances exist. The burden of proving unusual or extenuating circumstances rests entirely with the student. An “Academic Suspension” notation is posted to a student’s permanent UMW academic record.

Students suspended for academic reasons will be informed of their status in writing by the Registrar’s Office as soon as possible following the end of the term. Any future term class schedules that exist in UMW’s computer system prior to the end of the term of the suspension will be cancelled.
Written notification of academic suspension to the suspended student will explain available options.

Readmission Following Academic Suspension
Students who are suspended for academic reasons must apply for readmission to UMW. Students seeking readmission after sitting out the required suspension period must submit the following:
1. A properly completed Application for Readmission form.
2. A plan outlining how the suspended student will improve academic performance if readmitted, including a statement of the student’s education and career goals.
3. Any other documents required by other UMU offices.

These documents must be submitted to the Registrar’s Office at least two weeks prior to the start of the term for which the suspended student is seeking readmission. The UMW Registrar reviews and rules on these requests.

Appeals of Academic Suspension
Students seeking to appeal their suspension and return to UMW prior to their eligible return date must submit the following to the Registrar’s Office:
1. A properly completed Application for Readmission form.
2. A detailed statement or letter describing the extenuating circumstances causing the student’s poor academic performance, including supporting documentation (e.g., statement or letter from physician if student claims a medical emergency, etc.).
3. A plan outlining how the suspended student will improve academic performance if readmitted, including a statement of the student’s education and career goals, which must be reviewed by the student’s faculty advisor, the Dean of Students, and the Campus Counseling Center.
4. Any additional documents required by other UMW offices.

The documents listed above must be submitted to the Registrar’s Office at least two weeks prior to the start of the term for which the suspended student is seeking readmission. Readmission applications are reviewed and acted on by the Academic Admissions & Standards Committee.

Students begin the appeal process by submitting a letter of appeal and supporting documentation to the Academic Admissions & Standards Committee (via the Registrar’s Office). The next step in the appeals process is through the Provost. The Academic Calendar dictates time limits on appeals.

Transferring from UMW to Another College or University
It is the student’s responsibility to determine and closely follow the admission and program course requirements at the college or university to which they plan to transfer. These requirements can normally be found in that institution's catalog. Students planning to transfer from Montana Western should obtain a current catalog from the institution to which they plan to transfer (reference copies of catalogs are usually available online at an institution’s website). Students intending to transfer to another institution should work closely with their UMW faculty advisor and the intended transfer institution to ensure that the program of study being followed at Montana Western is suitable for transfer to the particular transfer institution. Students transferring to Montana University System institutions and who request Single Admissions File services will be charged the Single Admission File Fee; contact the Registrar’s Office for more information.

Caution regarding the transfer of UMW course credits: not all course credits transfer to every college or university. However, for students transferring out who “do their homework” in advance, transfer of credits from UMW is normally a smooth process if the courses taken at Montana Western are similar or equivalent to courses that would normally be taken at the transfer institution. If at any time students encounter what they consider to be a problem with transfer of UMW credits/courses to another institution, they are encouraged to contact a UMW administrator, who will assist students in working out legitimate problems with regard to course transfer. Students should provide as much information as possible (names, offices, and telephone numbers) to aid in reconciling credit or course transfer difficulties. Individuals transferring from UMW to another unit of the Montana University System who wish to have their UMW transcript evaluated for the purpose of determining completion of the General Education program should contact the UMW Registrar’s Office.

Grading System
The University of Montana Western utilizes a traditional letter grade system.

The following grades and grade points earned per credit are used in GPA calculation:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Grade Points Earned Per Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4.00</td>
</tr>
<tr>
<td>A-</td>
<td>3.70</td>
</tr>
<tr>
<td>A</td>
<td>3.30</td>
</tr>
<tr>
<td>B+</td>
<td>3.00</td>
</tr>
<tr>
<td>B</td>
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<tr>
<td>B-</td>
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<tr>
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</tr>
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<tr>
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<td>1.00</td>
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<tr>
<td>D</td>
<td>.70</td>
</tr>
<tr>
<td>F</td>
<td>0</td>
</tr>
</tbody>
</table>

The following grade symbols do not earn honor points and are not used in GPA calculation: W, R, I/INC, AU, P/F/NP, S, U, #, and NR. Grades for courses numbered 000-099(#) are not included in GPA calculation and do not apply toward graduation.
Grade reports and transcripts of students admitted to UMW before Summer 1999 show three different GPAs:
1. Institutional GPA: grade point average of courses attempted at UMW only;
2. Transfer GPA: grade point average of courses attempted at institutions other than UMW; and
3. Cumulative GPA: the average of all courses attempted at all colleges/universities, including UMW.

Since the summer of 1999, the UMW Registrar’s Office discontinued posting transfer coursework detail to UMW student academic records; only the UMW GPA is calculated on student records since that time.

Pass/Fail/No Pass (P/F/NP)
A student may elect to take a course on a Pass, Fail, or No Pass basis in lieu of a traditional letter grade. Pass/Fail/No Pass graded credits may not be counted for degree-required courses with the exception of Student Teaching, Senior Project/Thesis, Internships, and all nontraditional coursework (CLEP, AP, Military Training, Tech Prep, Institutional Challenge, or Exams for Credit). Nontraditional coursework must be evaluated according to the UMW Course Equivalency List.

No more than ten credits of Pass graded elective-only coursework may be counted toward a baccalaureate degree, and no more than six credits of Pass graded elective-only coursework may be counted toward an associate degree.

A freshman or sophomore with a grade point average of 2.00 or better may take one Pass/Fail/No Pass graded course each semester. Juniors and Seniors may take more than one Pass/Fail/No Pass course per semester. Election of the Pass/Fail/No Pass grade option requires the consent of the instructor. Attempted courses that are graded Pass/Fail/No Pass are excluded from GPA calculation.

Many graduate and professional schools and some employers do not recognize Pass/Fail/No Pass graded courses. Although UMW encourages students to consider the potential value of learning without the pressures associated with traditional grades and to experiment with Pass/Fail/No Pass graded courses, students should be aware of the potential negative effects of selecting this grading option.

Incomplete Grades (I/INC)
All assignments for a class must normally be completed by the last day of the semester or a specific block, or an earlier date set by the instructor of record. Faculty may give Incompletes in situations where a student is unable to complete required coursework during the semester or block because of illness, personal emergency, or academic conditions beyond the control of the faculty or student. Faculty may give an Incomplete to a student additional time to complete coursework that all other students in a class were required to complete during the published dates of a semester or term. Incompletes on a student’s academic record automatically prevent a student from graduating until the successful completion of all work. This deadline must be within one week of the end of the term. Incompletes on a student’s academic record automatically prevent and will delay graduation until a future term.

Students with Incompletes on their transcripts may jeopardize financial aid funding. For more information, contact Financial Aid, (406) 683-7511.

Conditions required for assigning an Incomplete are:
1. The student must notify the course instructor of the emergency situation before the end of the semester or block, or as soon as reasonably possible.
2. Three-fourths (3/4) or more of the required coursework must have been completed by the student before the end of the semester or block.

3. The course instructor should communicate requirements or conditions for course completion in writing. This documentation should include assignments and tests. The agreement should include a deadline for completion of all work. This deadline must be within one year of the date of the Incomplete unless an earlier deadline is established by the instructor. Deadlines beyond one year may be established by the instructor under extenuating circumstances.

Minimum Grades
Unless otherwise specified in this Catalog or formally communicated by the appropriate academic department, students must earn a minimum grade of C minus ("C-") or higher to satisfy requirements for all General Education and program course requirements and all General Education and program requirement prerequisite courses (see Minimum Grade Required to Complete Degree Requirements in this Catalog).

Final Grade Reports
Individual, and unofficial, block course grades are available via DAWGS within one week of the end of that block.

Official final grades are normally available to students within three weeks following the end of the term. Students can access final grades via the DAWGS website.

Transcripts of students who have outstanding debts or other restrictions at UMW will not be issued. Students with outstanding debts may review final grades by stopping at the Registrar’s Office during normal business hours.

Grade Changes
A change of grade may be made only in cases of instructor error, or in instances where fraud is determined. Grade change procedures are not to be used by faculty as a way of allowing certain students additional time to complete course assignments or to complete additional work once the term or block has ended.

A change of grade is not meant to substitute for an Incomplete when that grade cannot be justified. No grade may be changed after one full year from the date recorded unless approved by the instructor and the Provost. Students must retain the right to appeal grades according to campus policy outlined in the UMW Student Handbook (http://www.umwestern.edu/studentlife/studenthandbook.pdf).

Repeating Courses (E/R)
Repeating a course is defined as re-enrolling in the same UMW course that a student previously attempted. Students may have either failed or passed the course and the purpose for repeating the course is to improve the grade. When a course is officially repeated, the most recent grade is used in the calculation of the Grade Point Average. The previous course and grade remain on the transcript but are excluded from GPA calculation. A repeated course is designated with an “E” or “R” on a student’s transcript.

Students who fail UMW courses are encouraged to repeat those courses at the earliest possible time as they may have better retention of the subject matter, it improves their GPA, and it reduces the possibility that curriculum changes could make it impossible to take the same course in the future.

Academic Standing for Registration
A student is generally considered to be in good academic standing if the UMW GPA is 2.00 ("C") or higher and the student has not been placed on Academic Probation or Academic Suspension during the most recent term(s) of enrollment. A student in good standing is eligible to continue at or return to UMW.
Graduation Requirements
(Graduation does not occur automatically upon program completion; students must apply for graduation.)

Catalog Governing Graduation
The effective dates of this catalog are July 1, 2010 through June 30, 2011.

Degree-seeking students should select, rigorously follow, and meet graduation requirements in the selected UMW Catalog. Students enrolling between July 1, 2010 and June 30, 2011 are allowed to follow this Catalog provided all of the following conditions are met:
1. student graduates within six years of initial enrollment (July 2017).
2. there has been continuous enrollment with no interruptions except Summer Session.
3. student has not changed majors or degrees.
4. student has not elected to meet requirements listed in a more recent Catalog.

Students may select an alternative Catalog for graduation after initial enrollment at UMW provided:
1. student obtains faculty advisor approval.
2. Catalog selected is no more than six years old at time of graduation.
3. there has been continuous enrollment with no interruptions except Summer Session.
4. student has not changed majors or degrees.
5. student is not attempting to select/use a Catalog dated before a degree or program change.
6. student is not attempting to select a Catalog dated before the student’s enrollment date began.

A student whose attendance is interrupted for two or more consecutive semesters must switch to a Catalog less than six years old that was published after the student’s final readmission date.

While students must pick an “effective catalog” or a “catalog governing graduation” and complete all basic degree requirements (Major or BA Option, General Education Requirements, GPA, residency requirements, etc.) listed in that Catalog, UMW allows eligible students to select and complete requirements for a new/second Major, Minor, Option, Related Area, or General Education requirements from a second Catalog (see alternative Catalog limitations above) without having to meet all requirements in the second Catalog. Students must complete all courses required for the new Minor, second Major, BA Option, Related Area, or the General Education program as outlined in the other Catalog. Students must designate their “effective catalog” and the “other or second catalog” they are following on their graduation application and should provide this information to their advisors as an early date.

Declaration of Academic Field of Study
Students are strongly encouraged to determine the appropriate academic degree program(s) they will be pursuing as soon as possible in their academic careers. At the latest, students must declare academic fields of study upon reaching Junior status (60 credits earned). Earlier declarations are required of some students, such as those receiving federal financial aid. Upper division students must report to the Registrar’s Office all changes of major, area of concentration, or program upon reaching Junior status (60 credits earned). Earlier declarations are required of some students, such as those receiving federal financial aid.

Students are strongly encouraged to determine the appropriate academic degree program(s) they will be pursuing as soon as possible in their academic careers. At the latest, students must declare academic fields of study upon reaching Junior status (60 credits earned). Earlier declarations are required of some students, such as those receiving federal financial aid.

Students who wish to change their previously reported academic field of study must file a Request to Change Student Information form, signed by the student and the student’s faculty advisor, to the Registrar’s Office.

Students who are undecided about their choice of major should initially concentrate on taking General Education courses provided by UMW. Students should declare a major area of study with the Registrar’s Office no later than the third semester of attendance in order to complete degree requirements within the normal eight semesters (four years) of study and to maintain eligibility for federal financial aid.

Change of Major or Degree
Students who change majors or degree programs must notify the Advising Office or Registrar’s Office by filing a completed Request to Change Student Information form.

General Graduation Information
To graduate on one of the four UMW graduation dates, a degree candidate must submit a properly completed Application for Graduation or Program Completion form within the specified deadline and must have completed all degree requirements. All required courses must be satisfactorily completed and final grades filed with the Registrar’s Office. All applicable paperwork (completed Course Substitution/Waiver forms, official transfer transcripts) must be on file in the Registrar’s Office by the end of the graduation term. Candidates for graduation from UMW are responsible for ascertaining that all requirements for their intended degree program have been completed within the deadline.

Note that additional preparation, competencies, or remedial work may be specified by the department to correct any deficiencies for that academic field of study.

Minimum Grade Required to Complete Degree Requirements
(General Education, Degree Program Requirements, Program Prerequisites)
Effective Fall Semester 2005, the minimum acceptable grade required by the Montana University System (MUS) to meet General Education and program-specific course requirements and program prerequisite course requirements for a degree is “C-“. The minimum grade required to meet free elective requirements is “D-“ (unless the institution requires a higher minimum). Students who entered the Montana University System prior to Fall 2005 and have maintained continuous enrollment since beginning their studies in the MUS (exclusive of Summer Sessions) are not subject to this policy. First-time freshman and transfer students entering the MUS and former MUS students who “stopped out” and are now returning to the MUS system beginning Fall 2005 and thereafter are subject to this policy.

Note: Some UMW programs require minimum grades higher than “C-“. Students are responsible for ascertaining specific minimum grade requirements for courses required in their chosen programs by carefully reviewing University publications and notices sent by campus and department officials.

Minimum Grade Point Average
A minimum UMW GPA of 2.00 (“C” average) in all courses specified for a degree is required for graduation. Some degree programs may require a higher GPA. Also, GPA requirements within a degree for such things as individual Majors, Minors, Options, or Related Areas might be higher.

Required Credits
Students must complete all requirements listed for a specific degree or degrees from an approved Catalog. The Bachelor of Arts, Bachelor of Applied Science, and Bachelor of Science degrees in Business, Early Childhood Education, and Natural Horsemanship require a minimum of 120 semester credits. The Bachelor of Science degrees in Elementary and Secondary Education require a minimum of 128 credits. Associate degrees require a minimum of 60-70 semester credits.

Residency Requirement: Bachelor’s Degree
To earn a baccalaureate degree from UMW, a student must satisfactorily complete all courses required for the degree and must complete the equivalent of one academic year of full-time resident credit, minimum 30 semester credits. A minimum of 20 of the last 30 semester credits must be in residence. The last semester of work to satisfy requirements for any UMW degree must be completed in residence. A minimum of 12 semester credits earned and attendance for the full semester is necessary to establish academic residence. Fifteen semester credits of the student’s Major, Broadfield, or Option, and/or ten credits of a student’s Minor or Related Area must be completed in residence.

Residency Requirement: Second Bachelor’s Degree
Candidates for a second bachelor’s degree must successfully complete a minimum of 30 additional related credits above the minimum credits required for the first degree, and complete all requirements for the second degree. All additional credits for the second degree must be completed in residence. In a case where the first bachelor’s degree was earned at UMW, the last 15 credits for the second degree must be completed in residence.
Written notice of intent to complete a second degree must be filed with the Registrar at least one semester before graduation. Students planning to earn a second degree must complete a separate Application for Graduation or Program Completion form for each degree.

Residency Requirement: Associate Degree
To earn an associate degree at Montana Western a student must complete a minimum of 16 credits while in residence at UMW. These 16 credits must be the last credits needed for the degree. A minimum of one semester of full-time study (12 credits or more) is required to establish residency. The credits required to meet residency requirements for an associate degree must also be courses that meet either General Education requirements or are advisor-approved courses in the student’s chosen area of emphasis.

Residency Requirement: Second Associate Degree
Candidates for a second associate degree must successfully complete all courses required for each associate degree or complete 16 additional credits beyond the 60 credits required for the first degree, whichever is greater. General Education requirements used to satisfy requirements for the first associate degree may be used to satisfy General Education requirements for the second degree with advisor and applicable academic department approval only. Students planning to earn a second degree must complete a separate Application for Graduation or Program Completion form for each degree.

Course Application to Degree Requirements: Single Course with Multiple Applications
Courses may be used to satisfy more than one degree requirement by approval of a student’s advisor and the Provost. Students pursuing completion of degree programs that include course overlaps must seek official approval for these overlap substitutions through their advisors (e.g., some of the courses required for a specific Major or Minor may also be required as part of a second Major or Minor, or as part of General Education or Professional Education requirements). All other course substitutions or waivers must be approved and documented on Course Substitution/Waiver forms and must be on file in the Registrar’s Office prior to applying for graduation. Refer to General Information section, Definitions, “Substitution (course)”.

Nontraditional Credits Applied to a Degree
No more than 30 semester credits of nontraditional coursework (CLEP, AP, Military Training, Credit by Exam, correspondence courses, Directed Study, Independent Study, Tech Prep, etc.), may be counted toward any degree at UMW. Specifically, no more than 20 semester credits of correspondence study approved by the appropriate department may be counted toward the degree, and no more than three courses in Independent Study may be counted toward the degree.

Academic Standing for Graduation
Students applying for graduation must be in good academic standing at UMW and all other colleges/universities previously attended.

Variances From Degree-Specific and/or General Education Requirements
Variances from published degree-specific and general graduation requirements must be documented. Documentation must be submitted on a timely basis (before the end of the graduation term specified on the student's Application for Graduation or Program Completion form).

Examples of the most common variances include:
- substituting a non-specified course for a required course as published in the Catalog (complete a Course Substitution/Waiver form); refer to General Information section, Definitions, “Substitution (course)”.
- waiving a degree requirement based upon satisfactory completion of work done in a nontraditional setting (complete a Substitution/ Waiver form); refer to General Information section, Definitions, “Waiver”.

Applying for Graduation
A student planning to earn an associate or baccalaureate degree from UMW must file a candidacy on an Application for Graduation or Program Completion form with the Registrar's Office. Students planning to earn two or more degrees must complete an Application for Graduation or Program Completion form for each degree and pay all applicable fees. Students who submit their Application for Graduation or Program Completion form by the early submission deadline will receive an audit of their academic record prior to the start of their last semester before graduation (see chart below). This audit helps determine any deficiencies in the requirements for graduation. The deadline for receiving an audit is listed in the table below under “Early Submission Deadline.”

Students who miss the early submission deadline may still graduate if their Application for Graduation or Program Completion form is received by the “Final Application Deadline” listed in the table. However, these students will likely not receive a graduation audit before their last semester prior to graduation. Note that if it is discovered that a student has an academic deficiency, the student’s graduation will be delayed to the next term.

Application for Graduation or Program Completion forms received after the final deadline will be accepted for the next applicable graduation date.

<table>
<thead>
<tr>
<th>Graduation Application Submission Dates</th>
<th>Early Submission Deadline</th>
<th>Final Application Deadline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring Semester</td>
<td>May 1 of the previous year</td>
<td>January 1</td>
</tr>
<tr>
<td>Summer</td>
<td>Sept 15 of the previous year</td>
<td>May 1</td>
</tr>
<tr>
<td>Fall Semester</td>
<td>March 15 (of the previous spring semester)</td>
<td>September 1</td>
</tr>
</tbody>
</table>

Example: A student who plans to graduate at the end of Spring Semester and files an Application for Graduation or Program Completion form by May 1st of the previous year will receive a graduation audit before the start of Spring Semester. If that same student files the Application for Graduation or Program Completion form after May 1st but before January 1st, the student has met the graduation application deadline for spring graduation but will likely not receive a graduation audit before the start of Spring Semester. If the student misses the January 1st application deadline, the graduation date will be moved to Summer.

Graduation Application Procedure
1. Obtain an Application for Graduation or Program Completion form at the Registrar’s Office. Students seeking a BS degree in Education should apply for graduation when applying for student teaching.
2. Obtain signatures from the following:
   a. Faculty Advisor.
   b. Financial Aid Office.
   c. Business Services.
3. Return completed Application for Graduation or Program Completion form to the Registrar’s Office on or before the published deadline. Complete all questions and obtain all necessary approvals. Applicants are responsible for meeting filing deadlines.
4. Applicants for BS degrees in Education must present a completed Application for Student Teaching form when submitting completed graduation applications.
5. Pay all graduation fees.

Applications of students not meeting degree requirements by the end of the semester or term indicated on the Application for Graduation or Program Completion form will be placed in an inactive status until they send written notification of a new desired term for graduation and pay the $10 audit fee. The inactivated application will remain on file for a maximum of one year from the term of the original application, and can be reactivated by:
1. contacting the Registrar’s Office in writing and providing a new/anticipated graduation date/term, and
2. paying the $10 graduation audit fee.

Individuals who fail to activate previously submitted graduation applications within the one-year period will have to re-apply for graduation (switch to the most recent Catalog, complete a new Application for Graduation or Program Completion form, and pay the $25 graduation application fee).

After an Application for Graduation or Program Completion form has been filed, the student must notify the Registrar’s Office of any changes to graduation status, such as semester of graduation, Majors/Minors, Options/Related Areas, or change of name and address. Students may be required to reapply depending upon the change made and the timing of
such notification. Students should notify the Registrar’s Office of any changes to their mailing address.

Application for Program Completion
Graduates with a bachelor’s degree from Montana Western or any regionally accredited institution who are attending UMW for the sole purpose of completing a program (second Major, Minor, Option, or Related Area) and not earning a degree, must meet the following requirements before being certified as having completed the selected program:

1. satisfy residency requirements.
2. successfully complete all prerequisite and required courses for the program.
3. meet all grade point average requirements of the appropriate program.
4. submit completed Application for Graduation or Program Completion form to the Registrar’s Office and pay appropriate fees by the published deadline.

The procedures & policies listed in this Catalog supersede those published previously and are subject to change at any time.

Classification/Types of Students

Classification of Students
1. Freshman— a degree-pursuing student who is entitled to unconditional admission and who has earned fewer than 30 semester credits.
2. Sophomore— a fully admitted, degree-pursuing student who has earned 30 to 59 semester credits.
3. Junior— a fully admitted, degree-pursuing student who has earned 60 to 89 semester credits.
4. Senior— a fully admitted, degree-pursuing student who has earned 90 or more semester credits.
5. Post-baccalaureate— a fully admitted student holding a baccalaureate degree from a regionally accredited college or university, or an approved foreign university.
6. Conditionally Admitted Student— a student who does not meet all of the standard admissions requirements.
7. Transient Student— a student over 19 years of age with no previous academic record on file at the UMW Registrar’s Office and who has not met all requirements for admission and who may or may not be degree-pursuing.

Types of Students
Continuing or Returning Student— a fully admitted student who completed the most recent term of enrollment at UMW in good academic standing and as such is eligible to enroll for classes during the next term. Spring Semester or Summer Session is considered the last regular semester for students returning for Fall Semester.

Current Student— a student who is officially enrolled and attending classes at UMW or one of its off-campus centers.

Dismissed/Suspended Student— a former or previous student who, due to poor academic performance or disciplinary reasons, is prohibited from enrollment at UMW; dismissed or suspended students may petition for readmission by filing an Application for Readmission form at the Registrar’s Office.

Former/Previous Student— an individual who attended UMW at some time in the past and who:
1. was not actively enrolled at UMW during the most recently completed regular semester; and
2. was in good academic standing when last enrolled at UMW.

Former students who have not attended UMW for one year or more must file an Application for Readmission form with the Registrar’s Office before resuming their studies at UMW.

Full-Time Student— for financial aid purposes, a student officially registered for a minimum of 12 semester credits of courses that require a minimum of 15 weeks of class attendance or participation during a regular semester.

Honor Student— a student who, upon completing degree requirements, has maintained at least a 3.33 UMW GPA and has completed at least 30 semester credits of resident college-level coursework applicable to a first baccalaureate degree. Minimum institutional GPA required for “honors”, “high honors”, and “highest honors” are:
- 3.33-3.64 cum laude
- 3.65-3.84 magna cum laude
- 3.85-4.00 summa cum laude

Eligibility for UMW honors designation is determined after all final grades for all courses attempted up to the date the first baccalaureate degree is conferred are posted to the graduate’s academic record.
- Rush Jordan Cup: awarded annually to the male Senior ranked first in his graduating class.
- Zella K. Flores Cup: awarded annually to the female Senior ranked first in her graduating class.

International (Foreign) Student— A student who is a citizen of a country other than the United States.

Non-Resident Student— a student who is classified as an out-of-state resident for MUS fee payment purposes.

Part-Term Student— a student officially registered for a minimum of 12 semester credits of courses that require less than 15 weeks of class participation during a regular semester. Financial aid is pro-rated for part-term students. Part-term students are not eligible for intercollegiate athletics.

Part-Time Student— a student registered for less than 12 credits during a regular semester. Financial aid is pro-rated for part-time students. Part-time students are not eligible for intercollegiate athletics.

Probationary Student— a student who is having academic difficulty and who has been conditionally allowed to return to UMW to improve his/her academic standing.

Resident Student— a student who is classified as a Montana resident for MUS fee payment purposes.

Transfer Student— a student who is fully admitted to UMW that attended another college or university and completed or attempted 12 or more credits of college-level, degree-applicable coursework in residence at that institution.
Definitions of Academic Terminology

Advanced Placement (AP) Program
Credit earned by satisfactory completion of the Advanced Placement Tests from the College Entrance Examination Board. Official AP score reports must be sent directly from the College Board to the UMW Registrar’s Office. Credit for specific examinations will be subject to UMW approval. Credits to be applied to specific course or program requirements must be approved by the appropriate department’s faculty. Credit earned through AP is graded “P” (Pass). For more information, contact the Registrar’s Office. Minimum score information can be found at the University website: www.umwestern.edu.

Attendance or Attending
Registering for and actively participating in learning/instruction activities associated with a class or classes.

Block (Experience One)
A four-week learning module usually consisting of 18 days of instruction. UMW operates on a semester system, including four 4-week blocks. Individual blocks are not to be construed as separate “terms of enrollment” (see “Term”).

Canceling University Enrollment for a Term
To cancel one’s enrollment for a term is to drop all classes prior to the beginning of a term/semester. Individuals who wish to cancel their enrollment for a term must submit written notice to the UMW Registrar’s Office before the beginning date of the term/semester for which they are registered. The University retains the right to cancel the class schedules of students who fail to complete the registration procedure or those who are dismissed from UMW for disciplinary reasons.

College Level Examination Program (CLEP)
Credit may be earned for satisfactory completion of the College Entrance Examination Board (CEEB) College-Level examinations. Official score reports must be sent from The College Board directly to the UMW Registrar’s Office. Credit for specific General Examinations and/or Subject Examinations will be subject to the approval of the University as listed on the UMW Course Equivalency List. Applicability of CLEP credits to specific course or program requirements at UMW must be approved by appropriate department faculty. Credits received through CLEP will be issued “P” (Pass) grades. Contact the Registrar for more information. Minimum score information can be found at the University website: www.umwestern.edu.

Common Course Numbering (MUS)
All undergraduate courses in the Montana University System (MUS) must go through a common course numbering process. This means that all courses deemed to be equivalent must possess the same course prefix, number, and title. Such courses will directly transfer on a one-to-one basis with equivalent courses at the receiving institution. The first set of commonly numbered courses was available for student enrollment for fall 2009. The OCHE Common Course Numbering Transfer Guide is available at: http://msudw.msu.montana.edu:9030/wfez/owa/mussfer_p_CCN_MAIN.

Course
A single instructional subject commonly described by department/subject/rubric, title, number, and credits in the UMW Catalog or Schedule of Classes.

Course Challenge Exams
The process of taking special Institutional Course Challenge exams to earn credit for a class based upon knowledge, skills, or competencies learned or mastered outside the normal classroom setting.

Course Exchange
The process of simultaneously dropping and adding courses covering the same time period or part of the term (e.g., “Block 3”) with an even exchange of courses/credits and within the deadline for such action.

Credit
A quantification of student academic learning. One credit represents what a typical student might be expected to learn in one week of full-time study (40-45 hours including class time and preparation). An alternative norm is one unit for three hours of student work per week (one hour of lecture plus two hours of study, or three hours of laboratory) for a 16-week semester.

Credit by Exam (Course Challenge)
The process of taking special examinations in courses for credit without enrolling in the courses. When a student has evidence of having covered the course content through life experience or formal post-secondary study such as vo-tech school, business college, proprietary school, or other non-college instruction, the student may request permission for credit by exam. Regular tuition and fees are charged for exams. Credit earned via course challenge or institutional challenge exam is graded “P” (Pass).

Credit Load
Total credits for which a student is officially registered at the start of a term.

Curriculum
A combination of courses arranged in sequence by years that constitutes a program of study leading to a degree.

Dean’s List
Announced at the end of each regular semester. All full-time undergraduate students earning a semester GPA of 3.33 or higher are listed on the Dean’s List for that semester. Courses numbered less than 100 and those for which a “P/F/NP” grade is issued do not count in the 12 credits required to be on the Dean’s List.

Degree
The formal distinction or recognition conferred upon successful completion of a unified, institutionally preordained program of study (curriculum).

Directed Study (DS)
An approved catalog course not scheduled to be taught during a specific term. No more than five students may enroll in a Directed Study course during a term. An approved DS contract must be filed on a timely basis in the Registrar’s Office before a student is allowed to enroll in a Directed Study course.

Drop a Course (or Courses)
To officially cease enrollment in a course. Students officially drop classes by accessing DAWGS (UMW online enrollment information system) and completing the drop procedure prior to the start of a term/semester, or by completing the appropriate paperwork at the Registrar’s Office. Once registered, students are officially enrolled in a class or classes until they drop a class, withdraw from the University (drop all classes), or cancel their enrollment (before the start of the term/semester). Students should review class schedule change procedures and the current Academic Calendar in this Catalog for deadlines to drop a class or withdraw from UMW. Dropping all classes for a term constitutes “Withdrawal from the University” (see “Course Schedule Changes”). Students are not allowed to drop classes that have ended nor can they drop classes for which the deadline to drop has passed.

Education Goal (Student)
The degrees (Major, Minor, Option, Related Area) a student plans to complete while enrolled at UMW. New students are asked to communicate their education goals when they apply for admission to Montana Western or as soon as possible thereafter (use Request to Change Student Information form).
Eligibility
Eligibility for participation in athletics or other campus activities is determined by meeting specified qualifications. Students engaging in an intercollegiate activity of the University or holding an ASUMW office must abide by the regulations of the respective conference or national association as well as UMW rules and regulations. ASUMW officers must not be on scholastic or disciplinary probation at any time during their term of office. Eligibility of all participants in intercollegiate extracurricular activities must be certified by the Registrar’s Office before participation and will require that an eligible student enroll in and attend academic classes covering the entire 16 weeks of a semester. To be eligible to participate in varsity or junior varsity athletics, students must be registered as a full-time student.

Enrollment Status (Student)
A student semester designation that is determined based on weeks of actual attendance and credit load. There are three (3) student enrollment status designations: full-time, part-time, and part-time (see “Classification/Types of Students” for each designation).

Grade Point Average (GPA)
A numerical value of the average quality of a student’s academic work at an institution. GPAs are usually expressed on a 4.00 scale (4.00=highest, 0.00=lowest). GPAs are calculated by dividing the total of all grade/honor points earned by the total credits attempted. Note: “P” graded courses, 00X courses, repeated courses, and withdrawn or dropped courses are excluded from GPA calculation.

Graduation with Honors
Recognition of a student who, upon completing degree requirements, has maintained at least a 3.33 UMW GPA and has completed at least 30 semester credits of resident college-level coursework applicable to a first baccalaureate degree. Minimum institutional GPA required for “honors”, “high honors”, and “highest honors” are:
- 3.33-3.64 cum laude
- 3.65-3.84 magna cum laude
- 3.85-4.00 summa cum laude

Eligibility for UMW honors designation is determined after all final grades for all coursework attempted up to the date the first baccalaureate degree is conferred are posted to the graduate’s academic record.

- Rush Jordan Cup: awarded annually to the male Senior ranked first in his graduating class.
- Zella K. Flores Cup: awarded annually to the female Senior ranked first in her graduating class.

Holds
A temporary designation on a student’s record indicating the need for that student to rectify specific deficiencies in their file or account. A hold prohibits the student from gaining access to their account, registering for classes, viewing grades, obtaining transcripts, or other requests for service until the deficiency is fulfilled. Students are responsible for “clearing” holds as soon as possible.

Honors Endorsement for Graduation
Students must have taken at least four Honors seminars, with at least two seminars at the 300- or 400-level. To be eligible to register for an Honors Seminar, students must first apply and be accepted into the Honors Program. An Application to Graduate with Honors Endorsement form (search for “Printable Forms” on the UMW website) must be returned to the Registrar’s Office together with graduation application materials.

Independent Study (IS)
Individual coursework that extends beyond the scope of the listed catalog courses. An approved Independent Study contract must be filed in the Registrar’s Office before a student is allowed to enroll in an Independent Study course.

Major (BS)
A prescribed combination of courses constituting a primary program of concentration in a specific discipline in the Bachelor of Science degrees. The Major consists of required courses. Transfer students must complete a minimum of 15 credits of approved resident study in the Major.

Major, Broadfield (BS)
A combination of prescribed courses constituting a program of concentration in a specific discipline of not less than 40 semester credits in the BS: Secondary Education degree, the Broadfield Major is intended to give the student depth of preparation. A GPA of 2.50 or above is required for successful completion of the Broadfield Major. Transfer students must complete a minimum of 15 credits of approved resident study in the Broadfield.

Minor (BS)
A prescribed combination of courses in a specific discipline (subject area) in the BS: Elementary Education and Secondary Education degrees constituting a program of lesser concentration (fewer courses) than the Major. Transfer students shall complete a minimum of 10 credits of approved resident study in the Minor.

Nontraditional Courses/ Credits
University credits or courses that are earned or offered outside the normal university classroom. Examples of nontraditional courses or credits are those earned through CLEP, Military Training, Advanced Placement, Tech Prep, Institutional Challenge Examinations, correspondence courses, and Directed or Independent Study courses (see “Credit for Nontraditional Learning Experiences”).

Official Transcripts
The term “official” in reference to academic credentials indicates the documents are forwarded directly to UMW by the school principal, college registrar, or originating agency. An official transcript must bear the official signature, stamp, or seal of the issuing agency. Faxed copies or copies stamped “Issued to Student” are not considered official records.

Option Area (B.A., B.S., B.A.S.)
A prescribed combination of courses that constitute a thematic program of study designed to provide the student pursuing the degree with a broad but rigorous background in preparation for future employment or educational endeavors.

Prerequisites and Corequisites
“Prereq” indicates specific requirements that must be met before enrollment in a course, such as course(s) satisfactorily completed, appropriate signatures obtained, etc. “Coreq” indicates courses that must be registered for and taken at the same time or within the same term/semester.

Registration or Registering
The process of enrolling or signing up for classes at UMW and paying all costs associated with such enrollment within the published deadlines for the term.

Related Area (B.A.
A prescribed combination of courses that focuses on a specific subject area and provides the student with in-depth knowledge that complements a chosen Option in the Bachelor of Arts degree.

Repeat (Course)
To attempt a specific UMW class a second or third time.

Residency Classification for Fee Purposes (In-State, Out-of-State)
All individuals are classified as in-state or out-of-state for purposes of paying tuition and fees. Students not initially classified as Montana residents who wish to have their residency status reviewed should contact the Registrar. Determination of residency status is based upon information provided on the Board of Regents Residency Questionnaire. Contact the UMW Registrar’s Office for the MUS Regents Residency Policy and the Residency Questionnaire.
Residency Requirement for Degrees
To earn a degree from UMW, students must complete a minimum amount of coursework as enrolled students on the UMW campus. Students must satisfactorily complete the equivalent of one academic year or two semesters of full-time on-campus study (32 semester credits minimum) to earn a bachelor’s degree at UMW. Students pursuing an associate degree at UMW must successfully complete a minimum of 16 semester credits of on-campus coursework. However, students must satisfactorily complete all courses required for a degree and complete minimum residency requirements, whichever is greater. A minimum of 20 of the last 32 credits toward the bachelor’s degree must be in residence. The last semester, 12 credits minimum of work to satisfy requirements for any degree must be in residence. A minimum of 12 credits earned and attendance for the full semester are necessary to establish a semester of residence (see page 29).

Semester
A 16-week period of enrollment at the start of which students register for all courses they plan to attempt. UMW operates on a semester system. There are four blocks during a semester.

Substitution (Course)
Replacement of a required course by another approved course. A specific course may generally be used to satisfy one specific graduation requirement. Course Substitution/Waiver Request forms are available at the Registrar’s Office. Generally, students should complete and file a Course Substitution/Waiver Request form whenever they complete a course that is an approved deviation from course degree requirements outlined in their effective Catalog.

Summer Session
A 12-week term of enrollment consisting of three 4-week blocks offered from May to August.

Tech Prep Program
A program negotiated between UMW and specific Montana high schools that evaluates and approves certain high school courses for university credit at Montana Western. Written agreements between area high schools and UMW specify which courses can be articulated and outline minimum competencies and levels of knowledge and achievement that must be met to earn credit. To earn credit, students must usually matriculate at UMW within two years of completion of the courses that meet Tech Prep requirements. Tech Prep credits do not meet residence requirements and the program is considered a nontraditional method of earning credit. Other limitations apply (contact the University Tech Prep Coordinator for more information).

Teacher Education Program (TEP)
The professional education program offered through the UMW Education Department. Education degree-seeking students must purchase a copy of the Teacher Education Program Student Handbook at the Campus Bookstore, which explains processes necessary for admission into the Teacher Education Program.

Term
A semester (either Fall or Spring) or Summer Session; a 4-week block is NOT considered a term of enrollment.

To Be Determined (TBD)
Utilized throughout degree program requirements for courses that have not yet been assigned a common course number via the OCHE transferability process. Where TBD is listed, the UMW course listed in the adjacent column is the current course being used.

Transcript of the Academic Record
A complete summary of a student’s academic performance at Montana Western. A student’s UMW transcript may include a summary of credits attempted at other colleges/universities. However, the UMW transcript should not be considered an official record of work completed at other institutions. The official UMW transcript bears the signature of the Registrar and the UMW seal. Official transcripts are sent directly to a third party or are to be received by a third party in a sealed UMW envelope. All other copies are unofficial, including transcripts marked “student copy”. The Academic Record is a permanent record that reflects the unabridged academic history of a UMW student, and an unofficial summary of all college-level work the student attempted at institutions attended prior to the student’s enrollment at UMW.

Transcripts are issued only upon receipt of a written request from the student and will not be released until all holds at UMW have been removed (admissions requirements not completed, financial obligations not paid, etc.). Transcripts are usually available within five working days after receipt of the request. A $3.00 processing fee is charged for each transcript requested. Students who request overnight postal service, FAX copies, or rush services, etc., will be charged additional fees/costs. Payment must be received before transcripts are released. Students paying with credit cards must provide the credit card number, type of card/issuing bank, card expiration date, and the cardholder’s name as it appears on the card. Written requests for transcript service should include the student’s full name and all other names used (maiden name, middle initial), Social Security Number, date and place of birth, and month and year of most recent attendance at UMW. Those requesting transcript service should include their own current address and phone number, the complete address of where the transcript should be sent, and any special services required (FAX, Fed-Ex, Rush, etc.).

Waiver
A waiver is an exemption from a degree requirement. Waivers must specify the basis for the exemption and be approved by the department course instructor or committee and the Provost. Students waiving a course do not receive course credits. Course Substitution/Waiver Request forms are available at the Registrar’s Office.

Withdrawal from the University
To officially drop ALL classes for the term/semester and cease attendance. Review the “Course Schedule Change” section of this Catalog for procedures on how to withdraw and refer to the Academic Calendar for withdrawal deadlines. Students may not withdraw from block classes that have ended nor from classes for which the deadline to withdraw has passed.
Tuition & Fees
Business Services
James E. Short Center
710 S Atlantic
Dillon MT 59725-3598
(406) 683-7101

The Business Services Office provides accounting and business services and strives to serve students in an efficient, effective, and timely manner in compliance with appropriate University, state, and federal regulations. The information that follows will help guide the student in understanding UMW’s fees, the costs associated with higher education, and the policies surrounding these issues.

According to federal law, a student’s financial and academic account is posted under the student’s name, not the parents’. Therefore, all fee statements, bills, and refund checks are mailed to the student, not the parents. However, refund checks generated as a result of a Parent PLUS loan are mailed to the parents unless the UMW Financial Aid Office has received written authorization to disburse the funds to the student.

Students are personally responsible for knowledge of policies and procedures governing payment of fees at the time stated in the Academic Calendar. A student’s registration is not complete until all fees are paid or until fee payment arrangements have been made. To finalize registration, students must complete the mandatory electronic Registration Finalization form, through the student’s account in DAWGS.

Checks should be made payable to UMW for the exact amount due for fees, board and room, and other necessary expenses.

A check presented to UMW that is subsequently returned by the bank for insufficient funds or other reasons will cause the student to be charged a returned check service charge of $15 in addition to the face value of the check. If payment for a returned check including the $15 returned check charge is received after the fee payment deadline, UMW will also assess a late registration fee of $40. An additional $40 late registration fee will be charged if registration/payment has not occurred by the 15th instructional day.

Montana Board of Regents policy permits students to pay fees in three installments. During a 16-week academic term, this policy provides that one-third (1/3) of all charges plus the $30 deferred payment fee are paid at registration, another one-third (1/3) within 30 days of registration, and the final one-third (1/3) within 60 days of registration. A $30 deferred payment service fee is charged for deferring fees. A Deferred Payment Contract (available at Business Services or on the web at http://www.umwestern.edu/administration/business/page2.htm), must be signed and returned to Business Services.

Business Services Policies

Monthly Bill Statements
Students will be sent a statement once before the beginning of each semester. Thereafter, billing statements will be electronic. Students may access their bills anytime online through their DAWGS account. It is the student’s responsibility to keep mailing addresses current through DAWGS online. Students are responsible for all tuition payments even if they have not received a billing statement.

Non-Payment
Any person who owes UMW any fees, fines, or other charges, regardless of the amount owed, will not be allowed to do any of the following until the full amount due has been paid or satisfactorily adjusted with Business Services:
1. receive academic credit or grades.
2. register for classes.
3. obtain any transcript, diploma, or record.
4. access any University facilities or services.

A late fee will be assessed the day after the due date if there is a balance due. Any attorney’s fees or other costs or charges necessary for the collection of the amount owed may be added to the outstanding balance.
Information about student fees provided in this Catalog is based upon probable rates for the 2010-2011 academic year. For a current schedule of tuition and fees, see the UMW website at http://www.umwestern.edu/current/. The summary tables of fees listed below are the per-credit, per-semester charges for resident, nonresident, Western Undergraduate Exchange (WUE), and Post-Baccalaureate students.

### Undergraduate

<table>
<thead>
<tr>
<th>Credits</th>
<th>Resident</th>
<th>Nonresident</th>
<th>Resident</th>
<th>Nonresident</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tuition Fee</td>
<td>Mandatory Fees</td>
<td>Tuition Fee</td>
<td>Mandatory Fees</td>
</tr>
<tr>
<td>1</td>
<td>$116.75</td>
<td>$112.90</td>
<td>$504.10</td>
<td>$115.90</td>
</tr>
<tr>
<td>2</td>
<td>233.50</td>
<td>124.35</td>
<td>1008.20</td>
<td>130.35</td>
</tr>
<tr>
<td>3</td>
<td>350.25</td>
<td>135.80</td>
<td>1512.30</td>
<td>144.80</td>
</tr>
<tr>
<td>4</td>
<td>467.00</td>
<td>147.25</td>
<td>2016.40</td>
<td>159.25</td>
</tr>
<tr>
<td>5</td>
<td>583.75</td>
<td>158.70</td>
<td>2520.50</td>
<td>173.70</td>
</tr>
<tr>
<td>6</td>
<td>700.50</td>
<td>170.15</td>
<td>3024.60</td>
<td>188.15</td>
</tr>
<tr>
<td>7</td>
<td>817.25</td>
<td>389.60</td>
<td>3528.70</td>
<td>410.60</td>
</tr>
<tr>
<td>8</td>
<td>934.00</td>
<td>401.05</td>
<td>4032.80</td>
<td>425.05</td>
</tr>
<tr>
<td>9</td>
<td>1,050.75</td>
<td>412.50</td>
<td>4536.90</td>
<td>439.50</td>
</tr>
<tr>
<td>10</td>
<td>1,167.50</td>
<td>423.95</td>
<td>5041.00</td>
<td>453.95</td>
</tr>
<tr>
<td>11</td>
<td>1,284.25</td>
<td>435.40</td>
<td>5545.10</td>
<td>468.40</td>
</tr>
<tr>
<td>12+</td>
<td>1,401.00</td>
<td>446.85</td>
<td>6049.20</td>
<td>482.85</td>
</tr>
</tbody>
</table>

1 Cumulative credits/hours earned (at all institutions). Transfer students who have more than 60 earned credits from other institutions and who do not submit their transcripts on a timely basis may have significant increases from their initial billing after transcripts are received by the Registrar’s Office. They will be reclassified as Undergraduate Upper Division students and their fees will be adjusted accordingly if the transfer evaluation determines the student is upper division.

### WUE\(^2\) & Post-Baccalaureate

<table>
<thead>
<tr>
<th>Credits</th>
<th>WUE Lower/Upper Division</th>
<th>Post-Baccalaureate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Western Undergraduate Exchange)</td>
<td>(Earned Baccalaureate Degree)</td>
</tr>
<tr>
<td></td>
<td>Resident</td>
<td>Nonresident</td>
</tr>
<tr>
<td></td>
<td>Tuition Fee</td>
<td>Mandatory Fees</td>
</tr>
<tr>
<td>1</td>
<td>$ 175.13</td>
<td>$115.90</td>
</tr>
<tr>
<td>2</td>
<td>350.26</td>
<td>130.35</td>
</tr>
<tr>
<td>3</td>
<td>525.39</td>
<td>144.80</td>
</tr>
<tr>
<td>4</td>
<td>700.52</td>
<td>159.25</td>
</tr>
<tr>
<td>5</td>
<td>875.65</td>
<td>173.70</td>
</tr>
<tr>
<td>6</td>
<td>1,050.78</td>
<td>188.15</td>
</tr>
<tr>
<td>7</td>
<td>1,225.91</td>
<td>202.50</td>
</tr>
<tr>
<td>8</td>
<td>1,401.04</td>
<td>216.85</td>
</tr>
<tr>
<td>9</td>
<td>1,576.17</td>
<td>231.20</td>
</tr>
<tr>
<td>10</td>
<td>1,751.30</td>
<td>245.55</td>
</tr>
<tr>
<td>11</td>
<td>1,926.43</td>
<td>260.90</td>
</tr>
<tr>
<td>12+</td>
<td>2,101.50</td>
<td>276.25</td>
</tr>
</tbody>
</table>

2 Western Undergraduate Exchange (WUE) – Students from Alaska, Arizona, California, Colorado, Hawaii, Idaho, Nevada, New Mexico, North Dakota, Oregon, South Dakota, Utah, Washington, and Wyoming may be eligible for the Western Undergraduate Exchange program. Upon notification of eligibility, these students will pay 1.5 times the incidental fee for resident students plus all other fees applicable to non-resident students. Contact Admissions for more information on WUE Scholarships.
### Mandatory Fee Schedule Definitions

All students are required to pay tuition and mandatory fees. All costs for a term must be paid, or satisfactory payment arrangements made, by the end of the third day of the semester/term, after which late fees will be charged (see Academic Calendar for applicable dates).

<table>
<thead>
<tr>
<th>Non-Refundable Fees (Assessed from the 1st Credit)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Orientation Fee</strong></td>
<td>Assessed once to every new/transfer student admitted to UMW.</td>
</tr>
<tr>
<td><strong>Registration Fee</strong></td>
<td>Applied to processing costs; assessed each semester of registration.</td>
</tr>
<tr>
<td><strong>Admission Application Fee</strong></td>
<td>Must accompany all applications for admission.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fees Assessed from the 1st Credit</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Academic Equipment Fee</strong></td>
<td>Applied to the purchase, lease, and maintenance of equipment, which will provide a primary benefit to the instructional program, including library, faculty, laboratories, and other related acquisitions.</td>
</tr>
<tr>
<td><strong>Academic Facilities Fee</strong></td>
<td>Student-initiated fee to remodel classrooms and laboratories. The remodeling of classrooms and laboratories was initially financed through the issuance of bonds. This fee repays the bond indebtedness and provides funds for classroom and lab maintenance.</td>
</tr>
<tr>
<td><strong>Academic Support Center Fee</strong></td>
<td>The Academic Support Center provides academic assistance services to all students. The fee assessed students supports tutoring services.</td>
</tr>
<tr>
<td><strong>Building Fees</strong></td>
<td>Applied to the long-term debt and used for the acquisition and renovation of buildings, parking lots, or campus infrastructure. Students obtain a parking decal at no charge that allows them to park on campus, except in restricted spaces, with payment of this fee.</td>
</tr>
<tr>
<td><strong>Computer Fee</strong></td>
<td>Used for the purchase, lease, and maintenance of computer equipment, software, or related items that benefit the instructional program, including state-of-the-art computer labs.</td>
</tr>
<tr>
<td><strong>Radio Fee</strong></td>
<td>Student-initiated fee applied toward support of the student radio station.</td>
</tr>
<tr>
<td><strong>Student Union (SUB) Fee</strong></td>
<td>Used to pay a portion of the operating costs, including debt service, for the Student Union Building.</td>
</tr>
<tr>
<td><strong>Technology Fee</strong></td>
<td>Used to keep the campus infrastructure updated for current core technology (licensing, internet access, email/media distribution, library systems, learning management system, course enhanced software, wiring, switching) as well as provide staff support for these critical instructional/administrative services. The UMW administration and ASUMW Student Senate agree to expenditure budget for these fees each year.</td>
</tr>
<tr>
<td><strong>Tuition Fees</strong></td>
<td>Applied to instructional costs; varies by student classification and number of credits taken.</td>
</tr>
<tr>
<td><strong>Wescolite Fee</strong></td>
<td>Student-initiated fee applied toward costs of publishing the student newspaper.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fees Assessed at the 7th Credit</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Activity Fee</strong></td>
<td>Student-initiated fee applied to the Associated Students of the University of Montana Western (ASUMW) organization; this fee provides support to ASUMW services and activities.</td>
</tr>
<tr>
<td><strong>Athletic Fee</strong></td>
<td>Helps to support intercollegiate athletic programs and comply with gender equity laws. Students can attend all UMW sporting events, except tournaments, at no additional charge.</td>
</tr>
<tr>
<td><strong>Health Service Fee</strong></td>
<td>UMW has contracted with a health care provider to provide medical services for students. This fee provides for a Campus Counselor, free access for students to the Community Health Center services, and a Student Wellness program including fitness equipment.</td>
</tr>
<tr>
<td><strong>Medical Insurance Fee</strong></td>
<td>All students are required to have medical insurance while attending UMW. Students enrolled for four or more credits for either Fall or Spring Semester will be charged for the student insurance plan on their schedule bill for that semester. Students have until the 15th class day of each term to waive this student insurance coverage at Business Services. Students who drop below four credits by the 15th class day and have not specifically requested insurance are automatically dropped from the plan and the premium amount is credited to the student’s account. Students that withdraw from UMW after the 15th class day will still be charged and covered by UMW’s Student Health Insurance. Internet class credits are not considered in determining the eligibility of the student. The student insurance plan is available to all students taking a minimum of four credits. Under limited circumstances, students enrolled for fewer than four credits may petition for insurance coverage. Contact Business Services for information.</td>
</tr>
<tr>
<td><strong>Recycling Fee</strong></td>
<td>Student-initiated fee supports the campus recycling program.</td>
</tr>
</tbody>
</table>
## Special/Other Fees

<table>
<thead>
<tr>
<th>Fee Type</th>
<th>Description</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auditor Tuition Fee</td>
<td>Students auditing courses are assessed the same fees as if courses were taken for credit.</td>
<td>Varies</td>
</tr>
<tr>
<td>Cooperative Student/Internship Fee</td>
<td>Per credit hour.</td>
<td>$10 Maximum</td>
</tr>
<tr>
<td>Course Fees/Field Trip Fees¹</td>
<td>Variable.</td>
<td>Varies</td>
</tr>
<tr>
<td>Deferred Payment Service Charge</td>
<td>To set up a deferred student installment plan.</td>
<td>$30</td>
</tr>
<tr>
<td>Distance Learning Fee – ECE Sites</td>
<td>Per credit hour.</td>
<td>$15</td>
</tr>
<tr>
<td>Certification Fee</td>
<td>Per credit hour.</td>
<td>$20 Maximum</td>
</tr>
<tr>
<td>Distributed Online Learning Fee</td>
<td>Per credit hour.</td>
<td>$45</td>
</tr>
<tr>
<td>E-Commerce Fee</td>
<td>Per transaction fee charged to persons making online payments to UMW via credit card.</td>
<td>$10 Maximum</td>
</tr>
<tr>
<td>Key Replacement Fee</td>
<td></td>
<td>$60</td>
</tr>
<tr>
<td>Late Deferred Payment Fee</td>
<td>Late charge for default or delinquency of deferred student installment plan.</td>
<td>$15</td>
</tr>
<tr>
<td>Late Add/Drop Fee</td>
<td>Per course, if Add/Drop approved.</td>
<td>$10</td>
</tr>
<tr>
<td>Late Registration Fee</td>
<td>Maximum of two fees may be charged per semester.</td>
<td>$40</td>
</tr>
<tr>
<td>Graduation Fee</td>
<td>Per degree.</td>
<td>$15</td>
</tr>
<tr>
<td>Graduation/Program Completion Audit Fee</td>
<td>Per degree audit.</td>
<td>$10</td>
</tr>
<tr>
<td>Out-of-State Student Teaching Fee</td>
<td></td>
<td>$100 Minimum</td>
</tr>
<tr>
<td>Placement Charge</td>
<td>Varies according to service requested to cover postage, copying, etc.</td>
<td>Varies</td>
</tr>
<tr>
<td>Returned Check Fee</td>
<td></td>
<td>$15</td>
</tr>
<tr>
<td>Single Admissions File Fee</td>
<td>Administrative fee for students transferring to another institution.</td>
<td>$8</td>
</tr>
<tr>
<td>Student ID Card Replacement Fee</td>
<td></td>
<td>$6</td>
</tr>
<tr>
<td>Summer/Continuing Education Fee</td>
<td>Published in current Outreach Bulletins.</td>
<td>Varies; $80 Minimum/Credit Hour</td>
</tr>
<tr>
<td>Testing Fee</td>
<td>Variable.</td>
<td>Varies</td>
</tr>
<tr>
<td>Transcript Fee</td>
<td>Per copy; one official copy at no charge.</td>
<td>$3</td>
</tr>
</tbody>
</table>

¹ The Board of Regents may approve additional fees at the request of campuses. Fees frequently are assessed for selected courses such as science course fees, art materials, and health & human performance course costs. Course-related fees are listed on fee statements, which are mailed to all pre-registered students prior to the start of a regular semester, or may be viewed and printed from the website at http://www.umwestern.edu/current/. Special fees are assessed for extended field trips in various departments. An Education Service Fee is charged for off-campus programs. Other fees and costs may apply.
Costs of On Campus Services

On Campus Housing

Housing Residency Requirements
All students with fewer than 30 total credits are required to live in the residence halls. Exceptions to this policy are granted for the following reasons:
1. Student is living at home with parents or guardians.
2. Student is married or a parent with child custody.
3. Student is 20 years of age or older.

Housing Deposit
Students applying for on-campus housing are required to pay a $100 housing deposit at the time of application. This deposit is applied as a damage deposit. Individuals who cancel their room reservation on a timely basis may be refunded the entire deposit depending upon the cancellation notification date. Students in the residence halls will receive a refund of the $100 damage deposit if there is no damage to their room at the time of final check-out, providing the proper residence hall check-out procedure is followed. Amounts listed are per semester unless otherwise stated.

Residence Hall Room & Board Rates
In addition to the room and board rates listed below, students in the residence halls are charged an additional $10 residence hall activities fee to defray the cost of activities in the residence halls and a $46 telecommunications fee, which is charged to all residents to defray a portion of the fixed costs of the telephone, network, and internet service. Each residence hall room has a telephone jack.

Single occupancy may be assigned depending on available space.

For the 2010-2011 academic year UMW will continue to offer a seven-day meal plan. This plan costs $1700 per semester and allows students "All Day Access" to the dining hall. In addition, $100 of that amount is applied to a cash flex plan at the Bark-n-Bite convenience store. This allows students to dine at a time that fits into their schedule. There is no carryover of unused funds to the next semester.

<table>
<thead>
<tr>
<th>2010-11 Residence Hall Rates Per Semester</th>
<th>2010-11 Meal Plan Per Semester</th>
<th>Additional Charges Per Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regular Double Room $1,110</td>
<td>$1,700</td>
<td>$10 Residence Hall Activities Fee</td>
</tr>
<tr>
<td>Regular Single Room $1,210</td>
<td></td>
<td>$46 Telecommunications Fee</td>
</tr>
<tr>
<td>Large Single Room $1,300</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2-Room Apt (as a Double) $1,210</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suite (as a Double) $1,170</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suite (as a Single) $1,430</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Refund of Fees
(The $30 Registration Fee, $30 Admissions Application Fee, and $60 Orientation Fee are non-refundable.)

Refund for Withdrawal from the University
Students who withdraw or drop below full-time status during a regular 16-week semester will receive a refund based on the number of instruction days of a semester completed from the start of classes of a term until the time a student completes official action to drop/withdraw. The withdrawal process begins and ends at the Registrar’s Office. The date used in determining the amount credited to the student’s account is the official withdrawal date as recorded by the UMW Registrar. There is no refund after the 15th class day of a term.

Students using the deferred payment plan will have their withdrawal credit applied to their student account, but may still owe some or all of the deferred balance. All existing debts such as a deferred payment plan balance, library charges, bookstore charges, etc., will be deducted from any refund due the student. For further information, contact Business Services.

Refund of Fees for Withdrawal from UMW – Regular Semester
Fees are refunded to students on a pro-rated basis in accordance with Montana Board of Regents and federal regulations for those who officially withdraw from UMW or drop below full-time status. The amount of fees refunded is based upon the date official action to drop/withdraw is completed, the student’s classification, and the amount of related fees paid. Students are considered enrolled up to the date the Registrar’s Office validates the official withdrawal request or Drop/Add/Withdrawal form. Only in unusual or emergency situations will the Registrar’s Office post-date a withdrawal/drop and/or last date of attendance as a basis for calculating a refund.

Refund of Fees – Dropped Courses
The refund of fees for dropped courses is computed in accordance with the University’s regular fee schedule. No refund or credit is given for drops occurring after the 15th instructional day during a standard academic semester or the pro-rated equivalency during a shorter term.

Family Housing Rates
Low-cost housing is available on a first-come, first-served basis to families with members attending Montana Western. The living accommodations include units with one and two bedrooms. Rental rates include utilities and cable television connections. In addition, a $46 telecommunications fee is charged to all residents to defray a portion of the fixed costs of the telephone, network, and internet service. Contact the Student Affairs Office for information and applications.

<table>
<thead>
<tr>
<th>2010-11 Family Housing Rates Per Month</th>
<th>Additional Charge Per Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-Bedroom Apartment $365</td>
<td>$46 Telecommunications Fee</td>
</tr>
<tr>
<td>2-Bedroom Apartment $410</td>
<td></td>
</tr>
<tr>
<td>South Campus Housing Regular Room $320</td>
<td></td>
</tr>
<tr>
<td>South Campus Housing Suite, 1-Bedroom  $345</td>
<td></td>
</tr>
<tr>
<td>South Campus Housing Suite, 2-Bedroom $520</td>
<td></td>
</tr>
</tbody>
</table>

Vehicle Registration
Students receive a vehicle hanger decal at no charge when they register their vehicle at the Traffic Office. All students must display a current campus decal if they park on campus between the hours of 7:00 a.m. and 5:00 p.m. Monday through Friday year round. Reserved parking is available on a first-come, first-served basis for $160 a year. There is a $7.50 replacement fee for all decals lost or stolen.

Other Services
Other services provided on campus include a full bookstore, testing programs, etc. As rates charged for these services are too varied to present in this publication, contact the department providing the service for more information.

Vehicle Registration
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Other services provided on campus include a full bookstore, testing programs, etc. As rates charged for these services are too varied to present in this publication, contact the department providing the service for more information.
Withdrawal Date for Regular Semester
Note: Refund percentages shown below do not include any nonrefundable fees. The “Day of Instruction” pertains to the instructional day of the term as determined by the Academic Calendar (usually the first day of the first block of the semester).

<table>
<thead>
<tr>
<th>Regular Semester Withdrawal Date</th>
<th>Refund %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before 1st Day of Instruction</td>
<td>100%</td>
</tr>
<tr>
<td>1st to 5th Day of Instruction</td>
<td>90%</td>
</tr>
<tr>
<td>6th to 10th Day of Instruction</td>
<td>75%</td>
</tr>
<tr>
<td>11th to 15th Day of Instruction</td>
<td>50%</td>
</tr>
<tr>
<td>After 15th Day of Instruction</td>
<td>0%</td>
</tr>
</tbody>
</table>

Refund of Fees for Withdrawal from UMW – Time-Shortened Terms (Summer Session)
Students withdrawing from UMW during a term that is shorter than a regular 16-week semester will receive a refund based upon the percentage of the term completed and the amount of related fees paid. The following schedule reflects the percentage of the paid fees to be refunded in these instances. Refund percentages shown below do not include any nonrefundable fees.

<table>
<thead>
<tr>
<th>Time-Shortened Course Withdrawal Date</th>
<th>Refund %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before 1st Day of Instruction</td>
<td>100%</td>
</tr>
<tr>
<td>1% to 6.25% Instruction Days of Term Completed</td>
<td>90%</td>
</tr>
<tr>
<td>6.26% to 12.5% Instruction Days of Term Completed</td>
<td>75%</td>
</tr>
<tr>
<td>12.51% to 18.75% Instruction Days of Term Completed</td>
<td>50%</td>
</tr>
<tr>
<td>More than 18.75% Instruction Days of Term Completed</td>
<td>0%</td>
</tr>
</tbody>
</table>

Withdrawal Date for Time-Shortened Courses
The “Day of Instruction” pertains to the instructional day of the term as determined by the Academic Calendar.

Return of Federal Aid Funds
Federal regulations define the amount of federal aid funds to be returned by students who have received aid for the semester in which they withdraw. Students who have received aid must consult the Financial Aid Office before withdrawing.

Refund of Room & Board Charges
Fees paid for room and board charges are refunded on a prorated basis. During the final two weeks of the term, room fees will be forfeited. Residence Hall and Dining Service fee refunds are calculated on a daily prorated basis for students officially withdrawing from UMW. No Residence Hall or Dining Service refunds are made to students who have claimed their reservations for any semester by picking up a key or residing in a hall unless the student has officially withdrawn from UMW by the published deadline for withdrawal.

Medical Withdrawal
Medical withdrawals are granted for significant medical problems. Refunds for medical withdrawals initiated after the third week of classes are reviewed only if a significant medical problem originated in the first three weeks. Documentation from a medical provider must be provided.

Outreach/Extension Withdrawal
Requests for withdrawal from Outreach/Extension courses must be submitted in writing to the School of Outreach. Exceptions may apply to courses requiring the prepayment of fees. Exceptions are described in the Outreach Bulletins.
Academic Information

General Education Philosophy Statement
The University of Montana Western

All baccalaureate degree-seeking students at the University of Montana Western complete a program called “General Education”. The purpose of the General Education program at Montana Western is fivefold:
1. to introduce all students to the core arts and sciences disciplines;
2. to prepare students for university-level thinking;
3. to help students develop the skills and knowledge necessary for lifelong learning;
4. to give each student a foundation in democratic values; and
5. to foster engaged participation in a global society.

In keeping with its Mission Statement, UMW recognizes and values both the integrity of the individual and membership in an increasingly diverse and global society. Thus, the General Education program is experiential, multidisciplinary, and multicultural. This multidisciplinary program consists of at least two semesters of focused study. Each course in the General Education program presents a breadth of content including a survey of basic information, methods of identifying and solving problems, methods to communicate the results of scholarly endeavors, and a general set of inquiry skills that can be transferred or adapted to other disciplines.

The program is scheduled so that each student with the prerequisite skills can complete the requirements in one academic year, preferably the freshman year. The intent of the program is to provide a coherent academic experience through selected courses, some interdisciplinary, with the emphasis in each on developing students’ intellectual and communication skills.

Montana Western students are encouraged to work closely with a faculty advisor to select courses that focus on developing their individual qualities and interests.

Articulation agreements among the Montana University System (MUS) institutions ensure that students can transfer from one MUS institution to another with minimal loss of credit or time.

The UMW General Education program is consistent with the Montana University System General Education Standards found at http://www.mus.montana.edu/transfer/courses.htm.

Montana University System (General Education) Core Curriculum

New students transferring to UMW from any of the units of the Montana University System or one of the three public community colleges in Montana (Flathead Valley Community College, Dawson Community College, Miles Community College) and who have satisfactorily completed a minimum of twenty (20) credits of campus-specific general education courses (distribution requirements considered) prior to transferring to UMW can elect to complete the MUS (General Education) Core Curriculum in lieu of the UMW General Education program. Information on the MUS Core can be viewed online at http://mus.edu/transfer/gened.asp.

New transfer students who are eligible for this option should communicate their choice of General Education programs (UMW or MUS) at the earliest possible time so that UMW personnel (faculty advisors and Advising Office staff) may provide the most accurate and reliable degree advice possible.
The University of Montana Western
2010-2011

GENERAL EDUCATION PROGRAM….31-32 credits

Each course used to satisfy the General Education Program must be completed with a grade of C- or better.1

Whenever possible, freshman students should complete foundational courses, ENG 102/WRIT 101 and Mathematics (MATH/M), during their first year of enrollment at UMW.

<table>
<thead>
<tr>
<th>Pre-Fall 2009/2010 UMW Course</th>
<th>OCHE Equivalent Course Effective Fall 2009/2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Written &amp; Oral Communications—4 credits</td>
<td>WRIT 101 College Writing I (4)</td>
</tr>
<tr>
<td>Mathematics—4 credits</td>
<td>One Math course higher than MATH 007 Algebra</td>
</tr>
<tr>
<td>Behavioral &amp; Social Sciences—7-8 credits</td>
<td>One Math course higher than M 095 Intermediate Algebra</td>
</tr>
<tr>
<td>Humanities: Expressive Arts—4 credits</td>
<td></td>
</tr>
<tr>
<td>Humanities: Literary &amp; Artistic Studies—4 credits</td>
<td></td>
</tr>
<tr>
<td>Natural Sciences—8 credits</td>
<td></td>
</tr>
</tbody>
</table>

1 Elementary Education and Secondary Education Majors must achieve a grade of C- or higher in all General Education courses and all other degree requirements that are General Education courses.
### UMW General Education Courses that meet Montana University System Cultural Diversity Component [as indicated by (CD)]

<table>
<thead>
<tr>
<th>Pre-Fall 2009/2010 UMW Course</th>
<th>OCHE Equivalent Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 105 Introduction to Cultural Anthropology (4) (CD)</td>
<td>TBD</td>
</tr>
<tr>
<td>GEOG 102 Human Geography (4) (CD)</td>
<td>GPHY 121 Human Geography (4) (CD)</td>
</tr>
<tr>
<td>GEOG 202 Regional Geography of North America (4) (CD)</td>
<td>GPHY 246 Geography of North America (4) (CD)</td>
</tr>
<tr>
<td>HIST 101 European Civilization I (4) (CD)</td>
<td>HSTR 101 Western Civilization I (4) (CD)</td>
</tr>
<tr>
<td>HIST 102 European Civilization II (4) (CD)</td>
<td>HSTR 102 Western Civilization II (4) (CD)</td>
</tr>
<tr>
<td>HIST 111 American History to the Civil War (4) (CD)</td>
<td>HSTA 101 American History I (4) (CD)</td>
</tr>
<tr>
<td>HIST 112 American History Since Reconstruction (4) (CD)</td>
<td>HSTA 102 American History II (4) (CD)</td>
</tr>
<tr>
<td>HIST 225 Africa &amp; the Middle East (4) (CD)</td>
<td>HSTR 260 Africa &amp; the Middle East (4) (CD)</td>
</tr>
<tr>
<td>HIST 240 History of the Far East (4) (CD)</td>
<td>HSTR 255 History of the Far East (4) (CD)</td>
</tr>
<tr>
<td>HIST 263 United States Since 1945 (4) (CD)</td>
<td>HSTA 215 Post-World War II America (4) (CD)</td>
</tr>
<tr>
<td>HIST 274 World History (4) (CD)</td>
<td>HSTR 274 World History (4) (CD)</td>
</tr>
<tr>
<td>MUS 202 Introduction to Music Literature (4) (CD)</td>
<td>MUSI 202 Introduction to Music Literature (4) (CD)</td>
</tr>
<tr>
<td>PHIL 100 Introduction to Philosophy (4) (CD)</td>
<td>PHL 101 Introduction to Philosophy: Reason &amp; Reality (4) (CD)</td>
</tr>
<tr>
<td>POLS 121 American National &amp; State Government (4) (CD)</td>
<td>ISSS 121 American National &amp; State Government (4) (CD)</td>
</tr>
<tr>
<td>POLS 250 Political Theory (4) (CD)</td>
<td>PSCI 250 Introduction to Political Theory (4) (CD)</td>
</tr>
<tr>
<td>PSY 100 General Psychology (4) (CD)</td>
<td>PSYX 100 Introduction to Psychology (4) (CD)</td>
</tr>
<tr>
<td>PSY 201 Introduction to Cognition (4) (CD)</td>
<td>PSYX 280 Fundamentals of Memory &amp; Cognition (4) (CD)</td>
</tr>
<tr>
<td>PSY 265 Introduction to Motivation-Theory &amp; Practice (4) (CD)</td>
<td>PSYX 366 Motivation-Theory &amp; Practice (4) (CD)</td>
</tr>
<tr>
<td>PSY 275 Developmental Psychology (4) (CD)</td>
<td>PSYX 230 Developmental Psychology (4) (CD)</td>
</tr>
<tr>
<td>SOC 115 Introduction to Sociology (4) (CD)</td>
<td>SOCT 101 Introduction to Sociology (4) (CD)</td>
</tr>
<tr>
<td>SOC 203 Social Problems &amp; Deviant Behavior (4) (CD)</td>
<td>SOCT 201 Social Problems (4) (CD)</td>
</tr>
<tr>
<td>---</td>
<td>ISSS 202 Political Geography of the Rocky Mountain West (4) (CD)</td>
</tr>
</tbody>
</table>

### UMW General Education courses containing Native American content

<table>
<thead>
<tr>
<th>Pre-Fall 2009/2010 UMW Course</th>
<th>OCHE Equivalent Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 330 Mythology (4)</td>
<td>LIT 385 Mythology (4) (CD)</td>
</tr>
<tr>
<td>GEOG 102 Human Geography (4) (CD)</td>
<td>GPHY 121 Human Geography (4) (CD)</td>
</tr>
<tr>
<td>GEOG 202 Regional Geography of North America (4) (CD)</td>
<td>GPHY 246 Geography of North America (4) (CD)</td>
</tr>
<tr>
<td>HIST 111 American History to the Civil War (4) (CD)</td>
<td>HSTA 101 American History I (4) (CD)</td>
</tr>
<tr>
<td>HIST 112 American History Since Reconstruction (4) (CD)</td>
<td>HSTA 102 American History II (4) (CD)</td>
</tr>
<tr>
<td>HIST 263 United States Since 1945 (4) (CD)</td>
<td>HSTA 215 Post-World War II America (4) (CD)</td>
</tr>
<tr>
<td>PHIL 100 Introduction to Philosophy (4) (CD)</td>
<td>PHL 101 Introduction to Philosophy: Reason &amp; Reality (4) (CD)</td>
</tr>
<tr>
<td>POLS 121 American National &amp; State Government (4) (CD)</td>
<td>ISSS 121 American National &amp; State Government (4) (CD)</td>
</tr>
<tr>
<td>POLS 250 Political Theory (4) (CD)</td>
<td>PSCI 250 Introduction to Political Theory (4) (CD)</td>
</tr>
<tr>
<td>---</td>
<td>ISSS 202 Political Geography of the Rocky Mountain West (4) (CD)</td>
</tr>
</tbody>
</table>

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Introduction to Academic Degrees

Bachelor Degrees
Candidates for the Bachelor of Arts and Bachelor of Science degrees normally follow a four-year program, while candidates for the Bachelor of Applied Science degree normally follow a two-year program at UMW after completion of an Associate of Applied Science degree. The Montana University System requires the completion of a minimum of 120 credit hours for the Bachelor of Applied Science, Bachelor of Arts, Bachelor of Science in Business Administration, Bachelor of Science in Early Childhood Education, and Bachelor of Science in Natural Horsemanship degrees. The University System requires a minimum of 128 credit hours for the Bachelor of Science in Elementary Education and Secondary Education degrees at UMW.

The baccalaureate degree is conferred upon satisfactory completion of the designated curriculum and all general degree requirements. Refer to the various degree outlines for specific course requirements and to the graduation requirements listed in the Enrollment & Graduation section of this Catalog.

The equivalent of one academic year, or two semesters of full-time resident study, is required of any student planning to earn a bachelor’s degree at UMW. During this period, the student must earn not fewer than 30 semester credits. A minimum of 20 credits of the last 30 semester credits must be in residence.

Candidates for a second bachelor’s degree must complete a minimum of 30 credits and two semesters in residence, as well as the courses to satisfy the requirements of the second degree. In the case where the first bachelor’s degree was earned at UMW, a minimum of 15 credits toward the second degree must be taken in residence.

A student working toward two baccalaureate degrees at the same time must complete the courses required in both curricula and also complete a minimum of 30 credits beyond the minimum credits required for one of the degrees. A written notice of intent must be filed with the Registrar’s Office at least one semester before graduation.

Associate Degrees
The Associate degrees are generally four semesters of academic work that lead to a general understanding and knowledge base in a given area. Information on these degrees is available from the appropriate department as listed on the following page.

Certificate Programs
The Certificate programs are generally two semesters of academic work that lead to a certificate of completion in a given area. Contact the appropriate department for further information on these programs.

Pre-professional Programs
Pre-professional programs should be planned to meet the needs of individual students and the requirements of the professional program/school to which the student will transfer. In consultation with the appropriate UMW faculty advisor and the professional school’s representative, the student should plan a program to meet the desires and requirements of the professional school the student wishes to attend.

Many medical and veterinary schools prefer students who are well grounded in the fundamentals of science and who also have a sound liberal arts base. UMW can provide comprehensive preparation in a four-year program with its BA: Biology Option area. Most medical schools require, as a minimum, courses in mathematics, physics, English, biology, and chemistry. Since some schools have additional requirements, students should contact representatives at professional schools for assistance in course selection. Students transferring to bachelor’s degree nursing schools should carefully plan their program to include not more than a basic two-year pre-professional program at UMW and should consult with representatives at the degree-granting institution regarding proper course selection at UMW.

Law schools in the United States select students who show high promise in the analysis of abstract materials, written and oral expression, and general academic excellence. The pre-law advisor assists students with selection of courses, pre-law requirements, and general preparation for application to law school. Pre-law students select various majors, depending on their interests. The BA: Social Science, coupled with the Pre-Law Related Area, is the most common choice of students who wish to enter law school.

Students planning to pursue careers in engineering should be able to satisfy the mathematics, physics, and chemistry requirements at UMW prior to transferring to a professional engineering school. Depending upon the engineering profession selected, students may be required by the engineering school to take additional upper level courses in these subject areas. Faculty advisors at the transfer institution should be consulted when developing a plan to pursue programs of study in engineering.
**College of Arts & Sciences**

**Bachelor of Applied Science Degree**

**Bachelor of Arts Degrees**

*Note: Any combination of Option and Related Area may be selected besides the suggested combinations listed:*

**Mathematics Option**
- Related Areas:
  - Mathematical Biology
  - Mathematical Ecology
  - Mathematical Geology
  - Mathematical Physics

**Social Science Option**
- Related Areas:
  - Anthropology
  - History
  - Political Science
  - Pre-Law
  - Psychology
  - Restorative Justice
  - Society & Culture
  - Sociology
  - Women’s Studies

**Visual Arts Option**
- Related Areas:
  - Business
  - Illustration
  - Pre-Art Therapy
  - Studio Art

**Other Related Areas:**
- Drama
- Equine Studies
- Music
- Visual Arts (not to be taken with Visual Arts Option)

**Associate Degrees**

- Associate of Arts
- Associate of Science
- Associate of Applied Science: Business
- Associate of Applied Science: Early Childhood Education
- Associate of Applied Science: Education Studies
- Associate of Applied Science: Equine Studies
- Associate of Applied Science: Natural Horsemanship
- Associate of Applied Science: Tourism & Recreation

**Certificate Programs**

- Computerized Machine Tool Technology Certificate
  (*IT courses at Helena College of Technology*)
- Early Childhood Certificate
- Information Technology & Network Administration Certificate

**School of Education, Business, & Technology**

**Bachelor of Science Degrees**

**Business Administration**
- Options:
  - Equine Management
  - Health & Fitness Management
  - Industrial Technology Management
    (*IT courses at Helena College of Technology*)
  - Small Business Management
  - Tourism
  - Web & Digital Media

**Natural Horsemanship**
- Options:
  - Natural Horsemanship: Management
  - Natural Horsemanship: Psychology
  - Natural Horsemanship: Science

**Early Childhood Education**

**Elementary Education**
- Minor: Early Childhood Education
- Option: Coaching

**Middle School Options:**
- Earth Science
- Instructional Technology
- Mathematics
- Physical Science
- Life Science
- Social Studies

**Secondary Education**

**Majors:**
- Art K-12
- Art K-12 Broadfield
- Biology
- Business & Computer Applications
- Business & Computer Applications Broadfield
- Earth Science
- English
- General Science Broadfield
- History
- Industrial Technology (*IT courses at Helena College of Technology*)
- Mathematics
- Music K-12
- Physical Education & Health K-12
- Social Science Broadfield

**Minors:**
- Art K-12
- Biology
- Business & Computer Applications
- Computer Science K-12
- Drama K-12
- Earth Science
- English
- Health & Human Performance K-12
- History
- Industrial Technology (*IT courses at Helena College of Technology*)
- Library Media K-12
- Literacy K-12
- Mathematics
- Music K-12
- Special Education K-12

**Option:** Coaching
College of Arts & Sciences

The College of Arts & Sciences offers the following degrees:

**Bachelor of Applied Science (BAS)**

**Bachelor of Arts (BA)**
- BA: Biology Option
- BA: Environmental Interpretation Option
- BA: Environmental Sciences Option
- BA: Literature & Writing Option
- BA: Mathematics Option
- BA: Social Science Option
- BA: Visual Arts Option

**Associate of Arts (AA)**

**Associate of Science (AS)**

For further information on the Bachelor of Applied Science and Associate degrees, students should contact their faculty advisor.

Degree requirements for the Bachelor of Arts degree Options and Related Areas are listed on the following pages.
The Bachelor of Applied Science (BAS) degree program is designed to allow graduates with an Associate of Applied Science (AAS) degree to earn a bachelor’s degree with minimal loss of the time spent and credits earned in obtaining the AAS degree. Students may take/apply for one of the AAS degrees at UMW to meet the associate degree portion of the BAS. In most cases, students will need to earn an additional 60 credits beyond the AAS degree. Students will be encouraged to take as many 300- and 400-level courses as are appropriate to the student’s program.

- Earned Associate of Applied Science (AAS) degree from a regionally accredited institution.
- Completion of at least 60 semester credits beyond the student’s AAS degree (at least 30 of these credits must be upper division 300- or 400-level courses approved by the student’s advisor). These 60 credits must be approved by the Provost no later than the end of the first term of enrollment in the BAS program, and the residency requirement for a bachelor’s degree at UMW applies. Included in this category are:
  - Completion of UMW’s General Education program (page 42) or completion of the MUS General Education program or an approved General Education curriculum at another Montana University System campus. General Education courses will transfer on a course-by-course basis if an entire General Education curriculum has not been completed at another MUS campus.
  - Completion of an Option area of 20-28 credits individually designed by the student in consultation with an advisor and approved by the Provost in one of the areas listed below.
  - Electives for a total of 60 additional credits beyond the AAS degree.

<table>
<thead>
<tr>
<th>Option Area</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fine Arts &amp; Humanities</strong></td>
<td>20-28</td>
</tr>
<tr>
<td>(art, drama, English, foreign language, humanities, music, philosophy)</td>
<td></td>
</tr>
<tr>
<td><strong>Business</strong></td>
<td></td>
</tr>
<tr>
<td>(business, computer science, economics, tourism &amp; recreation)</td>
<td></td>
</tr>
<tr>
<td><strong>Early Childhood Education</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Health &amp; Human Performance</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Industrial Technology</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Mathematics</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Natural Science</strong></td>
<td></td>
</tr>
<tr>
<td>(biology, chemistry, geology, physics)</td>
<td></td>
</tr>
<tr>
<td><strong>Social &amp; Behavioral Science</strong></td>
<td></td>
</tr>
<tr>
<td>(anthropology, geography, history, political science, psychology, sociology)</td>
<td></td>
</tr>
<tr>
<td><strong>Interdisciplinary Core</strong></td>
<td></td>
</tr>
<tr>
<td>(approved by student’s advisor)</td>
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</tr>
</tbody>
</table>

**AAS Credits** 60

**General Education Credits** 31-32

**Option Area Credits** 20-28

**Elective Credits** 0-9

**TOTAL CREDITS REQUIRED** 120
Bachelor of Arts

The College of Arts & Sciences offers a Bachelor of Arts degree in seven Option areas below:

- Biology Option
- Environmental Interpretation Option
- Environmental Sciences Option
- Literature & Writing Option
- Mathematics Option
- Social Science Option
- Visual Arts Option

Students choosing these degree Options are also required to complete the General Education program (31-32 credits), an internship or thesis, elective courses, and a minimum of one Related Area. The Bachelor of Arts degree requires completion of a minimum of 120 total credits.

The BA Related Area is a prescribed combination of courses that focuses on a specific subject area and provides the student with an in-depth knowledge that complements a chosen Bachelor of Arts Option. Students should consult with their faculty advisor about Related Areas. Although students may choose any Related Area in the Bachelor of Arts program to complete this requirement, certain Related Areas are designed to be taken with particular degree Options (see page 45 for suggested combinations).

Students must complete a minimum of 10 semester credits of approved and required resident courses to complete a Related Area.

The elective courses must be approved by the student’s advisor.
Bachelor of Arts:
Biology Option

Program Mission Statement

The mission of the BA: Biology Option is to provide students with the educational background, laboratory and field skills, and research experience to obtain employment in a variety of biological fields, as well as prepare students to further their education in graduate and professional schools.

Students graduating with this degree will be extremely well prepared to compete with peers for careers in all areas of biological sciences. This degree is perfect for students interested in attaining careers after graduation in cutting edge fields such as the pharmaceutical industry, biotechnology, wildlife biology, ecology, government and private research labs, forensics, and many more. In addition, the curriculum of this degree has been tailored to provide students with all of the coursework necessary to attend top graduate and professional schools including Ph.D. and M.S. programs in areas such as wildlife biology, ecology, molecular or cellular biology), veterinary programs, medical school, dental school, pharmacy school, physician assistant, physical therapy, nursing, sports medicine, athletic training, and many others.

Although students may select any combination of Option and Related Area, the Related Areas listed for the Biology Option are designed to allow the student to choose to attain additional coursework in a number of very popular and exciting areas within the biological sciences, while still preserving the student’s flexibility to choose a career anywhere within biology. The Wildlife Biology Related Area is for students who want to continue on to graduate studies in the exciting field of wildlife biology or ecology and for students who wish to pursue careers in private organizations or in state fish and wildlife departments or federal agencies such as the U.S. Fish and Wildlife Service. The Cell/Molecular and Biological Mathematics Related Areas are perfect for students interested in many aspects of cellular biology including those interested in careers such as the pharmaceutical industry, biotechnology, forensics, research lab positions, or in advanced degrees in the biomedical sciences, including Ph.D., M.D., and D.V.M. The Pre-Professional Health Sciences and the Health & Human Performance Related Areas have been designed for students interested in many of the professional health science fields such as physician assistant, physical therapy, occupational therapy, sports medicine, athletic training, nursing, and many others. The Veterinary Science Related Area has been developed especially for the student interested in becoming a veterinarian. The courses in this degree should allow the student to meet and excel in all of the prerequisites for admittance into veterinary school.

All degree programs within the Biology Option require that students complete an internship or senior thesis as part of their educational experience. This internship/thesis component is an especially important aspect of this degree, giving students hands-on experience as they become actively involved in their own education. In many cases, students perform an internship by working or volunteering for an employer in their chosen area of interest. In addition, UMW’s active faculty provide students enrolled in the Biology Option area with various opportunities to perform cutting-edge research projects in novel areas of cell/molecular biology, wildlife biology, ecology, and mathematical biology, as well as other areas within the discipline. These research opportunities allow students to closely interact with professors to design and implement experiments to address novel questions in biology, which can form the basis of a senior thesis project.

Graduate Outcomes

Program graduates will:
- display an understanding of basic concepts in the diverse fields of biology and related fields including cell biology, zoology, ecology, wildlife biology, molecular biology, genetics, evolution, inorganic chemistry, organic chemistry, statistics, calculus, and physics.
- acquire practical experience with research techniques and methods in the biological sciences by mastering basic laboratory and field techniques for asking biological questions.
- demonstrate ability to read and understand primary scientific literature in his/her discipline.
- exhibit ability to write a basic scientific paper.
- acquire real-world experience in biology through an internship or a senior thesis project.
- acquire skills and methods necessary to collect, analyze, and present data relevant to their field of study.
- demonstrate mastery of oral communication for effective interaction with colleagues and the community.
- demonstrate ability to use the scientific method for asking biological-related questions and formulating questions in a testable manner.
- develop the ability to conduct research both independently and as a member of a team.

Assessment

The graduate outcomes for the BA: Biology Option are assessed through the graduate/exit survey, employer survey, alumni survey, feedback from internship supervisors, review of collected student-generated exhibits over time, and program self-study and/or reports from external reviews. The assessment plan for the BA: Biology Option is available on the web at www.umwestern.edu/administration/vcaa/accreditation/acbiology/.
## BA: Biology Option
### General Education & Core

<table>
<thead>
<tr>
<th>General Education (page 42)</th>
<th>General Education Credits</th>
<th>31-32</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Pre-Fall 2009/10 UMW Course</th>
<th>OCHE Equivalent Course</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>BIO 111 Biology I</td>
<td>BIOB 160 Prin/Living Syst</td>
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</tr>
<tr>
<td>CHEM 131 Gen Chem</td>
<td>CHMY 141 College Chem I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 131 Probability</td>
<td>STAT 121 Probability</td>
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<table>
<thead>
<tr>
<th>Biology Core</th>
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<tbody>
<tr>
<td>BIO 112 Biology II</td>
<td>BIOB 170 Prin/Biol Diversity</td>
<td>4</td>
</tr>
<tr>
<td>BIO 214 Gen Botany</td>
<td>BIOO 220 Gen Botany</td>
<td>4</td>
</tr>
<tr>
<td>BIO 255 Cell Biology</td>
<td>BIOB 260 Cell/Molecular Biol</td>
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</tr>
<tr>
<td>BIO 270 Conserv Biology</td>
<td>BIOE 250 Conserv Biol</td>
<td>4</td>
</tr>
<tr>
<td>BIO 343 Genetics</td>
<td>BIOB 375 Gen Genetics</td>
<td>4</td>
</tr>
<tr>
<td>BIO 450 Evolution</td>
<td>BIOB 420 Evolution</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 132 Gen Chem</td>
<td>CHMY 143 College Chem II</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 331 Organic Chem¹</td>
<td>CHMY 321 Organic Chem I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 201 Calculus</td>
<td>M 171 Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 233 Gen Physics</td>
<td>PHSX 220 Physics I</td>
<td>4</td>
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Select 1 from the following: 4

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>MATH 232 Statistics (4)</td>
<td>STAT 217 Intrmd Stats Concepts (4)</td>
<td></td>
</tr>
<tr>
<td>MATH/BIO 233 Biostats (4)</td>
<td>STAT 233 Biostats (4)</td>
<td></td>
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</table>

¹Students taking this Option with the Wildlife Biology Related Area may choose one course from the following:

CHEM 331/CHMY 321
ENVS 348
MATH 401/M 414
MATH 433/STAT 433

### Internship/Thesis

<table>
<thead>
<tr>
<th>Internship/Thesis Credits</th>
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Complete 3-11 credits from:

<table>
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<tr>
<th>Complete 3-11 credits from:</th>
<th>3-11</th>
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</thead>
<tbody>
<tr>
<td>BIO/CHEM 400 Coop Ed/Intrnshp (V 1-15)</td>
<td>BIO/CHEM 400 Coop Ed/ Intern (V 1-15) or BIOB/CHMY 498 Intern/Coop Ed (V 1-15)</td>
</tr>
<tr>
<td>HHP 479 Sports Med Intrnshp (2)</td>
<td>TBD</td>
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</table>

Complete 1 credit from the following:

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>BIOB 494 Sem: Public Pres (1)</td>
<td></td>
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<tr>
<td>BIOB 495 Intern/Thesis Pres (1)</td>
<td></td>
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</table>

### Related Area

<table>
<thead>
<tr>
<th>Related Area Credits</th>
<th>19-34</th>
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</thead>
</table>

Select any one BA: Related Area

<table>
<thead>
<tr>
<th>Select any one BA: Related Area</th>
<th>19-34</th>
</tr>
</thead>
<tbody>
<tr>
<td>Note: Some Option/Related Area combinations will require completion of additional prerequisites for some classes.</td>
<td></td>
</tr>
</tbody>
</table>

### Electives

<table>
<thead>
<tr>
<th>Elective Credits</th>
<th>0-22</th>
</tr>
</thead>
</table>

Select from any catalog courses (must have advisor’s approval)

<table>
<thead>
<tr>
<th>Select from any catalog courses (must have advisor’s approval)</th>
<th>0-22</th>
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</table>

TOTAL CREDITS REQUIRED 120
## BA: Biology Option

### Biological Mathematics

<table>
<thead>
<tr>
<th>Pre-Fall 2009/10 UMW Course</th>
<th>OCHE Equivalent Course</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 107 Morphometrics</td>
<td>M 125 Morphometrics</td>
<td>4</td>
</tr>
<tr>
<td>MATH 202 Calculus II</td>
<td>M 172 Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 260 Linear Algebra</td>
<td>M 251 Intro/Linear Algebra</td>
<td>4</td>
</tr>
<tr>
<td>MATH 401 Determin Modeling</td>
<td>M 414 Determin Models</td>
<td>4</td>
</tr>
<tr>
<td>MATH 433 Stochastic Modeling</td>
<td>STAT 333 Stochastic Modeling</td>
<td>4</td>
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**Select 3 from the following:** 12

<table>
<thead>
<tr>
<th>Courses</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>BIO 262 Microbiology (4)</td>
<td>BIO 260 Gen Microbiol (4)</td>
</tr>
<tr>
<td>BIO 425 Molecular Biology (4)</td>
<td>BIO 425 Adv Cell/Mol Biol (4)</td>
</tr>
<tr>
<td>BIO 471 Wildlife Ecol/Mgt (4)</td>
<td>TBD</td>
</tr>
<tr>
<td>BIO 477 Ecology1</td>
<td>BIOE 370 Gen Ecology1 (4)</td>
</tr>
<tr>
<td>BIO/MATH 331 Bioinformat (4)</td>
<td>STAT 331 Bioinformat (4)</td>
</tr>
<tr>
<td>BIO/MATH 332 Adv Fld Stats (4)</td>
<td>STAT 335 Adv Field Stats (4)</td>
</tr>
<tr>
<td>CHEM 441 Biochemistry (4)</td>
<td>TBD</td>
</tr>
<tr>
<td>ENVS 429 Env Field Studies (4)</td>
<td>TBD</td>
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**Total Credits** 32

### Cell/Molecular Biology

<table>
<thead>
<tr>
<th>Courses</th>
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<tbody>
<tr>
<td>BIO 262 Microbiology</td>
<td>BIO 260 Gen Microbiol</td>
</tr>
<tr>
<td>BIO 425 Molecular Biology</td>
<td>BIO 425 Adv Cell/Mol Biol</td>
</tr>
<tr>
<td>CHEM 332 Organic Chem</td>
<td>CHEM 332 Organic Chem II</td>
</tr>
<tr>
<td>CHEM 441 Biochemistry</td>
<td>TBD</td>
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**Select 1 from the following:** 4

<table>
<thead>
<tr>
<th>Courses</th>
<th></th>
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<tbody>
<tr>
<td>PHYS 234 General Physics (4)</td>
<td>PHYS 222 Physics II (4)</td>
</tr>
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<td>PHYS 235 General Physics III (4)</td>
<td>PHYS 224 Physics III (4)</td>
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**Select 2 from the following:** 8

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<td>STAT 331 Bioinformat (4)</td>
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<tr>
<td>BIO 371 Human Anat/Physiol (4)</td>
<td>TBD</td>
</tr>
<tr>
<td>BIO 372 Human Anat/Physiol (4)</td>
<td>TBD</td>
</tr>
<tr>
<td>BIO 471 Wildlife Ecol/Mgt (4)</td>
<td>TBD</td>
</tr>
<tr>
<td>BIO 477 Ecology1</td>
<td>BIOE 370 Gen Ecology1</td>
</tr>
<tr>
<td>CHEM 251 Quant Analysis (4)</td>
<td>CHEM 311 Analyt Chem/Quant Analysis (4)</td>
</tr>
<tr>
<td>CHEM 355 Physical Chem (4)</td>
<td>CHEM 361 Elem/Phys Chem (4)</td>
</tr>
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</table>

**Total Credits** 28

### Health & Human Performance

<table>
<thead>
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<tbody>
<tr>
<td>BIO 371 Human Anat/Physiol1</td>
<td>TBD</td>
</tr>
<tr>
<td>BIO 372 Human Anat/Physiol1</td>
<td>TBD</td>
</tr>
<tr>
<td>HHP 311 Athletic Training I</td>
<td>TBD</td>
</tr>
<tr>
<td>HHP 315 Biomechanics</td>
<td>TBD</td>
</tr>
<tr>
<td>HHP 317 Exercise Physiol</td>
<td>TBD</td>
</tr>
<tr>
<td>HHP 319 Motor Learn/Physiol</td>
<td>TBD</td>
</tr>
<tr>
<td>HHP 410 Athletic Training II</td>
<td>TBD</td>
</tr>
<tr>
<td>HHP 416 Cond Prog Devel</td>
<td>TBD</td>
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</table>

**Total Credits** 32

### Pre-professional Health Sciences

<table>
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<tbody>
<tr>
<td>BIO 371 Human Anat/Physiol</td>
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</tr>
<tr>
<td>BIO 372 Human Anat/Physiol</td>
<td>TBD</td>
</tr>
<tr>
<td>CHEM 332 Organic Chem</td>
<td>CHEM 332 Organic Chem II</td>
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**Select 1 from the following:** 4

<table>
<thead>
<tr>
<th>Courses</th>
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<tbody>
<tr>
<td>PHYS 234 Gen Physics (4)</td>
<td>PHYS 222 Physics II (4)</td>
</tr>
<tr>
<td>PHYS 235 Gen Physics III (4)</td>
<td>PHYS 224 Physics III (4)</td>
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</table>

**Select 3 from the following:** 12

<table>
<thead>
<tr>
<th>Courses</th>
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<tbody>
<tr>
<td>BIO 262 Microbiology (4)</td>
<td>BIO 260 Gen Microbiol (4)</td>
</tr>
<tr>
<td>BIO/MATH 331 Bioinformat (4)</td>
<td>STAT 331 Bioinformat (4)</td>
</tr>
<tr>
<td>BIO 425 Molecular Biology (4)</td>
<td>BIO 425 Adv Cell/Mol Bio (4)</td>
</tr>
<tr>
<td>---</td>
<td>BIO 427 Gen Parasitol (4)</td>
</tr>
<tr>
<td>CHEM 441 Biochemistry (4)</td>
<td>TBD</td>
</tr>
<tr>
<td>HHP 315 Biomechanics (4)</td>
<td>TBD</td>
</tr>
<tr>
<td>HHP 364 Nutrition (4)</td>
<td>TBD</td>
</tr>
<tr>
<td>PSTD 275 Develop Psych (4)</td>
<td>PSYX 230 Develop Psych (4)</td>
</tr>
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</table>

**Total Credits** 28

### Veterinary Science

<table>
<thead>
<tr>
<th>Pre-Fall 2009/10 UMW Course</th>
<th>OCHE Equivalent Course</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 262 Microbiology</td>
<td>BIO 260 Gen Microbiol</td>
<td>4</td>
</tr>
<tr>
<td>BIO 425 Molecular Biology</td>
<td>BIO 425 Adv Cell/Mol Biol</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 332 Organic Chem</td>
<td>CHEM 332 Organic Chem II</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 441 Biochemistry</td>
<td>TBD</td>
<td>4</td>
</tr>
<tr>
<td>EQST 201 Bsc Horse Care/Ntr</td>
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<td>4</td>
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**Select 1 from the following:** 4

<table>
<thead>
<tr>
<th>Courses</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 234 Gen Physics (4)</td>
<td>PHYS 222 Physics II (4)</td>
</tr>
<tr>
<td>PHYS 235 Gen Physics III (4)</td>
<td>PHYS 224 Physics III (4)</td>
</tr>
</tbody>
</table>

**Total Credits** 28

### Wilde Life Biology

If taking this Related Area with Biology Option, select 1 from the following as part of Option Core:

<table>
<thead>
<tr>
<th>Courses</th>
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</tr>
</thead>
<tbody>
<tr>
<td>CHEM 331 Organic Chem</td>
<td>CHEM 321 Org Chem I (4)</td>
</tr>
<tr>
<td>ENVS 348 Soil Science</td>
<td>TBD</td>
</tr>
<tr>
<td>MATH 401 Determin Modeling</td>
<td>M 414 Determin Models</td>
</tr>
<tr>
<td>MATH 433 Stochast Modeling</td>
<td>STAT 433 Stoch Moding</td>
</tr>
</tbody>
</table>

**Total Credits** 34

---

1 Prereq: MATH 131/STAT 121 and MATH 232/STAT 217
2 Prereq: GEOG 104/105 or GEOG 150/103, and MATH 131/STAT 121

---

The University of Montana Western Catalog 2010-2011
Bachelor of Arts: Environmental Interpretation Option

Program Mission Statement

The mission of the BA: Environmental Interpretation Option is to provide students with an understanding of the natural processes that create and shape Earth’s environments and the skills to communicate their understanding of these processes to a lay audience. Students will become informed, critical thinkers capable of evaluating environmental processes and issues, and will develop the skills to communicate their understanding to other people, especially those with little formal training in the natural sciences. Student development occurs through a course of study that emphasizes interdisciplinary, field-based projects that have societal relevance and require them to communicate their understanding to others. Students gain authentic experience communicating their understanding of the natural world through internships that are supervised by faculty and/or non-academic mentors.

The BA: Environmental Interpretation degree is designed to prepare students to pursue career opportunities as naturalists, environmental interpreters, outdoor educators, and conservation enforcement officers. The program is also excellent preparation for graduate work in environmental law, environmental policy, and environmental planning. The intellectual foundation of the Environmental Interpretation degree is a strong background in the field-based natural sciences in combination with courses that focus on communicating and engaging the public in understanding how the natural world works. The curriculum emphasizes breadth and integration over specialization because communicating the natural sciences to the public requires a holistic understanding of how the natural world works and the societal implications and applications of this knowledge.

Montana Western has an agreement with the National Outdoor Leadership School (NOLS), a recognized leader in outdoor education, which allows students to seamlessly transfer earned credits between NOLS and UMW.

Graduate Outcomes

Program graduates will:

- demonstrate knowledge about the natural processes that create and shape our environment.
- acquire skills and methods necessary to communicate discipline-specific knowledge to others, especially those with little formal training in the natural sciences.
- demonstrate knowledge of the concepts central to his/her field of study. Field of study includes the Environmental Interpretation Option and a specific Related Area.
- acquire skills and methods necessary to communicate field of study knowledge to others.

Assessment

The graduate outcomes for the BA: Environmental Interpretation Option are assessed through the graduate/exit survey, employer survey, alumni survey, feedback from internship supervisors, review of collected student-generated exhibits over time, and program self-study and/or reports from external reviews. The assessment plan for the BA: Environmental Interpretation Option is available on the web at http://www.umwestern.edu/administration/vcaa/accreditation/accenviroint/.
BA: Environmental Interpretation Option
General Education & Core

General Education – see page 42

<table>
<thead>
<tr>
<th>Pre-Fall 2009/10 UMW Course</th>
<th>OCHE Equivalent Course</th>
<th>General Education Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 112 Biology II</td>
<td>BIO 170 Prin/Biol Diversity</td>
<td>4</td>
</tr>
<tr>
<td>GeOL 150 Env Geology</td>
<td>GEO 103 Intro/Envtl Geology</td>
<td>4</td>
</tr>
<tr>
<td>MATH 131 Probability</td>
<td>STAT 121 Probability</td>
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General Education Credits 31-32

Environmental Interpretation Core

<table>
<thead>
<tr>
<th>Pre-Fall 2009/10 UMW Course</th>
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<th>Core Credits</th>
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<tbody>
<tr>
<td>BIO 214 Gen Botany</td>
<td>BIO 220 Gen Botany</td>
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<td>BIO 270 Conserv Biology</td>
<td>BIOE 250 Conserv Biol</td>
<td>4</td>
</tr>
<tr>
<td>BIO 355 Systematic Botany</td>
<td>BIO 435 Plant Systematics</td>
<td>4</td>
</tr>
<tr>
<td>ENVS 269 Map/Comp/GPS</td>
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<td>ENVS 329 Nat Res Issues</td>
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<td>4</td>
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<td>ENVS 372 Our Wildnd Hrge</td>
<td>TBD</td>
<td>4</td>
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<td>ENVS 480 Env Interp</td>
<td>TBD</td>
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<td>GeOL 230 Geol/Amer West</td>
<td>GeO 230 Geol/Amer West</td>
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<td>PHYS 239 Phys Meteorol</td>
<td>PHSX 249 Phys Meteorol</td>
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<tr>
<td>PHYS 240 Astronomy</td>
<td>ASTR 110 Intro/Astronomy</td>
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<td></td>
<td>Select 2 different courses from:</td>
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<tr>
<td>ENVS 260 Wldlns Sklls (2)</td>
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Core Credits 42

Internship/Thesis

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<thead>
<tr>
<th>Pre-Fall 2009/10 UMW Course</th>
<th>OCHE Equivalent Course</th>
<th>Internship/Thesis Credits</th>
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<tbody>
<tr>
<td>ENVS 400 Internship (V.1-15)</td>
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<td>4-12</td>
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<tr>
<td>ENVS 498 Sr Proj/Thesis (V.1-15)</td>
<td>TBD</td>
<td>4-12</td>
</tr>
</tbody>
</table>

Internship/Thesis Credits 4-12

Related Area – see page 45

<table>
<thead>
<tr>
<th>Pre-Fall 2009/10 UMW Course</th>
<th>OCHE Equivalent Course</th>
<th>Related Area Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>19-34</td>
</tr>
</tbody>
</table>

Note: Some Option/Related Area combinations will require completion of additional prerequisites for some classes.

Electives

<table>
<thead>
<tr>
<th>Pre-Fall 2009/10 UMW Course</th>
<th>OCHE Equivalent Course</th>
<th>Elective Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>0-24</td>
</tr>
</tbody>
</table>

Select from any catalog courses (must have advisor’s approval)

TOTAL CREDITS REQUIRED 120
## Biological Naturalist

### General Education

<table>
<thead>
<tr>
<th>Pre-Fall 2009/10 UMW Course</th>
<th>OCHE Equivalent Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 131 Probability</td>
<td>STAT 121 Probability</td>
</tr>
<tr>
<td>BIO 111 Biology I</td>
<td>BIOB 160 Prin/Living Syst</td>
</tr>
<tr>
<td>BIO 153 Surv/MT Wldlf/Hab</td>
<td>BIOO 101 Surv/MT Wldlf/Hab</td>
</tr>
<tr>
<td>BIO 477 Ecology</td>
<td>BIOE 370 Gen Ecology</td>
</tr>
<tr>
<td>ENV 452 Envi Ed</td>
<td>TBD</td>
</tr>
<tr>
<td>MATH 232 Statistics</td>
<td>STAT 217 Int Stats Concepts</td>
</tr>
</tbody>
</table>

Select 2 from the following:

| BIO 222 Invasv Species (4) | BIOE 222 Invasv Species (4) |
| BIO 273 Entomology (4)     | BIOO 262 Intro/Entomol (4)  |
| BIO 473 Ornithology (4)    | BIOO 470 Ornithology (4)    |
| BIO 475 Mammalogy (4)      | BIOO 475 Mammalogy (4)      |
| BIO 479 Vertebrate Zool (4) | BIOO 450 Vert Zool (4)      |

Total Credits: 28

## Geological Naturalist

### General Education

<table>
<thead>
<tr>
<th>ENVS 452 Envi Ed</th>
<th>TBD</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOL 226 Rocks/Min/Res</td>
<td>GEOL 226 Rocks/Min/Res</td>
</tr>
<tr>
<td>GEOL 330 Struc/Tectonics</td>
<td>GEOL 315 Struc Geol</td>
</tr>
<tr>
<td>GEOL 378 Surficial Process</td>
<td>GEO 378 Surficial Process</td>
</tr>
<tr>
<td>GEOL 432 Deposional Envs</td>
<td>GEO 309 Sedmt/Stratgphy</td>
</tr>
<tr>
<td>GEOL 480 Hydrogeology</td>
<td>GEO 421 Hydrology</td>
</tr>
</tbody>
</table>

Select 1 from the following:

| CHEM 101 Intro to Chem (4) | CHMY 121 Intr/Gen Chem (4) |
| CHEM 131 Gen Chem (4)      | CHMY 141 Coll Chem I (4)   |

Total Credits: 32

## Pre-professional Fish & Wildlife Conservation Officer

### General Education

<table>
<thead>
<tr>
<th>MATH 131 Probability</th>
<th>STAT 121 Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 111 Biology I</td>
<td>BIOB 160 Prin/Living Syst</td>
</tr>
<tr>
<td>BIO 153 Surv/MT Wldlf/Hab</td>
<td>BIOO 101 Surv/MT Wldlf/Hab</td>
</tr>
<tr>
<td>BIO 473 Ornithology</td>
<td>BIOO 470 Ornithology</td>
</tr>
<tr>
<td>BIO 475 Mammalogy</td>
<td>BIOO 475 Mammalogy</td>
</tr>
<tr>
<td>BIO 477 Ecology</td>
<td>BIOE 370 Gen Ecology</td>
</tr>
<tr>
<td>MATH 232 Statistics</td>
<td>STAT 217 Int Stats Concepts</td>
</tr>
</tbody>
</table>

Select 1 from the following:

| BIO 222 Invasv Species (4) | BIOE 222 Invasv Species (4) |
| ENV 441 Sust Res Mgt (4)   | TBD                  |
| SOC 320 Mediation (4)       | SOCI 360 Mediation (4) |

Total Credits: 28

---

1. Prereq: MATH 131/STAT 121 and MATH 232/STAT 217
2. Prereq: GEOL 101/GEO 103 or GEOL 150/GEO 105, and MATH 131/STAT 121
Program Mission Statement

The mission of the BA: Environmental Sciences Option is to provide students with an in-depth understanding of the natural processes that create and shape our environment, as well as knowledge of the human impact on the environment. Students will become informed, critical thinkers capable of scientifically evaluating complex issues involving the environment. Student development occurs through a course of study that emphasizes interdisciplinary, field-based research projects that have societal relevance. Students also gain authentic disciplinary experience through thesis research and/or internships that are supervised by faculty and/or industry mentors.

Many careers for those with BA: Environmental Sciences degrees are available in the area of natural resources study and management. Those with a background in environmental sciences are needed in many state and federal agencies as well as in private industry and consulting firms. The BA prepares students for entry-level positions in many of these areas and provides excellent background for the graduate training required for entry into and success in graduate programs in many science areas.

Graduate Outcomes

Program graduates will:

- demonstrate knowledge about the natural processes that create and shape our environment.
- acquire skills and methods necessary to collect, analyze, and present data relevant to their field of study.
- develop the ability to conduct research both independently and in a team.
- be able to communicate effectively with colleagues and the community.
- demonstrate knowledge of the concepts central to his/her field of study, including scientific and quantitative skills. Field of study includes the Environmental Sciences Option and a specific Related Area.

Assessment

The graduate outcomes for the BA: Environmental Sciences Option are assessed through the graduate/exit survey, employer survey, alumni survey, feedback from internship supervisors, review of collected student-generated exhibits over time, and program self-study and/or reports from external reviews. The assessment plan for the BA: Environmental Sciences Option is available on the web at www.umwestern.edu/administration/vcaa/accreditation/accenviro/.

Teaching Careers

Students in this degree program who wish to become teachers should refer to the Advising Protocol on page 58, and to the BS: Secondary Education degrees.
### BA: Environmental Sciences Option
#### General Education & Core

**General Education (page 42)**

<table>
<thead>
<tr>
<th>Pre-Fall 2009/10 UMW Course</th>
<th>OCHE Equivalent Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 112 Biology II</td>
<td>BIOB 170 Prin/Biol Diversity 4</td>
</tr>
<tr>
<td>GEOL 150 Env Geology</td>
<td>GEO 103 Intro/Envtl Geology 4</td>
</tr>
<tr>
<td>MATH 131 Probability</td>
<td>STAT 121 Probability 4</td>
</tr>
</tbody>
</table>

**General Education Credits** 31-32

**Environmental Science Core**

| BIO 214 Gen Botany          | BIOO 220 Gen Botany 4 |
| BIO 270 Conserv Biology     | BIOE 250 Conserv Biol 4 |
| CHEM 131 Gen Chem           | CHMY 141 Coll Chem I 4 |
| CHEM 132 Gen Chem           | CHMY 143 Coll Chem II 4 |
| ENVS/PHIL 201 Hist/Phil/Sci| PHL 241 Hist/Phil/Sci 4 |
| ENVS 269 Wild Skills:       | TBD 2 |
| Map/Comp/GPS                | TBD 4 |
| ENVS 329 Nat Rsrc Issues    | TBD 4 |
| ENVS 348 Soil Science       | TBD 4 |
| ENVS 429 Env Field Studies  | TBD 4 |
| MATH 201 Calculus I         | M 171 Calculus I 4 |
| MATH 232 Statistics         | STAT 217 Int Stats Cncepts 4 |
| PHYS 233 Gen Physics        | PHSX 220 Physics I 4 |

**Environmental Science Core Credits** 46

**Internship/Thesis**

<table>
<thead>
<tr>
<th>Complete 3-7 credits from: 3-7</th>
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<tbody>
<tr>
<td>BIO/CHEM/ENVS/GEOL/MATH 400 Coop Ed/Intnshp (V 1-15)</td>
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<td>---</td>
</tr>
</tbody>
</table>

**Internship/Thesis Credits** 4-8

**Related Area (page 45)**

<table>
<thead>
<tr>
<th>Select any one BA: Related Area 19-34</th>
</tr>
</thead>
<tbody>
<tr>
<td>Note: Some Option/Related Area combinations will require completion of additional prerequisites for some classes.</td>
</tr>
</tbody>
</table>

**Related Area Credits** 19-34

**Electives**

| Select from any catalog courses (must have advisor’s approval) 0-20 |

**Elective Credits** 0-20

**TOTAL CREDITS REQUIRED** 120
### BA: Environmental Sciences Option

#### Related Areas

### Applied Mathematical Science

<table>
<thead>
<tr>
<th>Pre-Fall 2009/10 UMW Course</th>
<th>OCHE Equivalent Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 202 Calc II</td>
<td>M 122 Calc II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 203 Calc III</td>
<td>M 273 Multivar Calc</td>
<td>4</td>
</tr>
<tr>
<td>MATH 260 Linear Algebra</td>
<td>M 221 Intro/Linear Alg</td>
<td>4</td>
</tr>
<tr>
<td>MATH 401 Determ Moding</td>
<td>M 414 Determ Models</td>
<td>4</td>
</tr>
<tr>
<td>MATH 433 Stochast Moding</td>
<td>STAT 433 Stochast Mod</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 234 Gen Physics II</td>
<td>PHYS 222 Physics II</td>
<td>4</td>
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</table>

Select 2 from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 471 Wildlife Ecol/Mgt†</td>
<td>4</td>
</tr>
<tr>
<td>BIO 477 Ecology 4, 5</td>
<td>4</td>
</tr>
<tr>
<td>GEOL 378 Surfical Proc</td>
<td>4</td>
</tr>
<tr>
<td>GEOL 480 Hydrogeo³</td>
<td>4</td>
</tr>
<tr>
<td>MATH 343 Found/Math ³</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 235 Gen Physics III</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 401 Topics/Mod Physics:</td>
<td>TBD</td>
</tr>
<tr>
<td>Intro/Quantum Mechanics ³</td>
<td>TBD</td>
</tr>
</tbody>
</table>

**Total Credits:** 32

### Biology

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>BIO 111 Biology I</td>
<td>4</td>
</tr>
<tr>
<td>BIO 112 Biology II</td>
<td>4</td>
</tr>
<tr>
<td>BIO 255 Cell Biology</td>
<td>4</td>
</tr>
<tr>
<td>BIO 262 Microbiology</td>
<td>4</td>
</tr>
<tr>
<td>BIO 343 Genetics</td>
<td>4</td>
</tr>
<tr>
<td>BIO 477 Ecology 4, 5</td>
<td>4</td>
</tr>
<tr>
<td>GEOL 480 Hydrogeo³</td>
<td>4</td>
</tr>
<tr>
<td>BIO 222 Invasive Species (4)</td>
<td>4</td>
</tr>
<tr>
<td>BIO 273 Entomology (4)</td>
<td>4</td>
</tr>
<tr>
<td>BIO 355 Syst Botany (4)</td>
<td>4</td>
</tr>
<tr>
<td>BIO 450 Evolution (4)</td>
<td>4</td>
</tr>
<tr>
<td>BIO 473 Ornithology (4)</td>
<td>4</td>
</tr>
<tr>
<td>ENVS 441 Sust Resrc Mgt (4)</td>
<td>TBD</td>
</tr>
</tbody>
</table>

**Total Credits:** 32

### Environmental Geochemistry

<table>
<thead>
<tr>
<th>Pre-Fall 2009/10 UMW Course</th>
<th>OCHE Equivalent Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 255 Cell Biology</td>
<td>BIO 260 Cell/Molec Biol</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 331 Organic Chem</td>
<td>CHMY 321 Org Chem I</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 332 Organic Chem</td>
<td>CHMY 323 Org Chem II</td>
<td>4</td>
</tr>
<tr>
<td>CHEM/GEOL 431 Env Geochem</td>
<td>CHMY/GEOL 431 Env Geochem</td>
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</tr>
<tr>
<td>GEO 226 Rocks/Min/Res</td>
<td>GEO 226 Rocks/Min/Res</td>
<td>4</td>
</tr>
<tr>
<td>GEO 378 Surficial Process</td>
<td>GEO 378 Surficial Process</td>
<td>4</td>
</tr>
<tr>
<td>GEO 480 Hydrogeo³</td>
<td>GEO 421 Hydrogeo³</td>
<td>4</td>
</tr>
</tbody>
</table>

**Total Credits:** 28

### Geology

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
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<tbody>
<tr>
<td>GEO 226 Rocks/Min/Res</td>
<td>4</td>
</tr>
<tr>
<td>GEO 330 Struc/Tectonics</td>
<td>4</td>
</tr>
<tr>
<td>GEO 378 Surficial Process</td>
<td>4</td>
</tr>
<tr>
<td>GEO 409 Geol Seminar</td>
<td>4</td>
</tr>
<tr>
<td>CHEM/GEOL 431 Env Geochem</td>
<td>4</td>
</tr>
<tr>
<td>GEO 432 Depositional Envs</td>
<td>4</td>
</tr>
<tr>
<td>GEO 480 Hydrogeo³</td>
<td>4</td>
</tr>
</tbody>
</table>

**Total Credits:** 28

### Sustainable Natural Resource Management

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 471 Wildlife Ecol/Mgt†</td>
<td>4</td>
</tr>
<tr>
<td>BIO 477 Ecology 4, 5</td>
<td>4</td>
</tr>
<tr>
<td>ECON 434 Resource Econ</td>
<td>4</td>
</tr>
<tr>
<td>ENVS 381 Nat Res Law</td>
<td>4</td>
</tr>
<tr>
<td>ENVS 441 Sust Resrc Mgt</td>
<td>4</td>
</tr>
<tr>
<td>GEO 378 Surficial Process</td>
<td>4</td>
</tr>
</tbody>
</table>

**Total Credits:** 28

### Wildlands Therapy

#### General Education

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>PSY 100 General Psych</td>
<td>4</td>
</tr>
<tr>
<td>ENVS 260 Wildlands Skills</td>
<td>TBD</td>
</tr>
<tr>
<td>ENVS 452 Envir Ed</td>
<td>TBD</td>
</tr>
<tr>
<td>ENVS 480 Envir Interp</td>
<td>TBD</td>
</tr>
<tr>
<td>GEO 230 Geol/Amer West</td>
<td>TBD</td>
</tr>
<tr>
<td>HHP 231 First Aid/Safety</td>
<td>TBD</td>
</tr>
<tr>
<td>PSY 220 Intr/Soc Sci Rsrch Meth</td>
<td>TBD</td>
</tr>
<tr>
<td>PSY 265 Intr/Motiv/-Thry/Pract</td>
<td>TBD</td>
</tr>
<tr>
<td>PSY 360 Learning/Memory</td>
<td>TBD</td>
</tr>
<tr>
<td>PSY 438 Abnormal Psy</td>
<td>TBD</td>
</tr>
</tbody>
</table>

**Total Credits:** 31

---

1 Prereq: BIO 111/BIOB 160 & 112/BIOB 170 beginning 2005-06 Catalog
2 Prereq: MATH 341/M 329
3 Prereq: PHYS 235/PHSX 224
4 Prereq: MATH 131/STAT 121 and MATH 232/STAT 217
5 Prereq: GEOL 101/GEOL 101 or GEOL 150/GEOL 103, and MATH 131/STAT 121
Advising Protocol – BA: Environmental Sciences  
(for Students Interested in a Teaching Career)

This advising protocol is for students planning to obtain a BA: Environmental Sciences Option with Related Areas in Biology, Geology, or Applied Mathematical Science who also wish to become licensed to teach in secondary schools (grades 5-12). For students who complete the BA: Environmental Sciences Option using the current Catalog, the requirements listed below lead to licensure in either Biology, Earth Science, or Mathematics. Students considering this option should review their career goals and progress at Montana Western with their faculty advisor in the degree program and a faculty member in the Department of Education, as well as with the Advising Center regarding licensure.

Students who complete these program requirements qualify for a second degree – BS: Secondary Education, with a major in Biology, Earth Science, or Mathematics.

Admission to the Teacher Education Program (TEP) and completion of all requirements of the Teacher Education Program are required (see page 85). Contact a faculty member in the Department of Education for advising.

For all participating students:

<table>
<thead>
<tr>
<th>Professional Education Core (in preferred order)</th>
<th>OCHE Equivalent Course</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pre-Fall 2009/10 UMW Course</strong></td>
<td><strong>OCHE Equivalent Course</strong></td>
</tr>
<tr>
<td>ED 120 Becom/Prof Educator</td>
<td>EDU 201 Intro/Ed u/Fld Exp</td>
</tr>
<tr>
<td>ED 253 Psy Found/Teach/Learn</td>
<td>EDU 222 Ed Psy/Child Dev</td>
</tr>
<tr>
<td>HHP 241 Pers/Comm Hlth (4)</td>
<td>TBD</td>
</tr>
<tr>
<td>HHP 245 Human Sexuality (4)</td>
<td>TBD</td>
</tr>
<tr>
<td>ED 341 Exceptional Learner</td>
<td>TBD</td>
</tr>
<tr>
<td>ED 328 Curr/Inst/Assess/Mgt (3)</td>
<td>EDU 382 Assess/Curric/ Instr (4)</td>
</tr>
<tr>
<td>ED 425 Mtlctr/Global Ed (3)</td>
<td>EDU 311 Cltr/Divers/ Ethics in Global Educ (4)</td>
</tr>
<tr>
<td>HHP 231 First Aid/Safety</td>
<td>TBD</td>
</tr>
<tr>
<td>Select 1 from the following:</td>
<td>TBD</td>
</tr>
<tr>
<td>ED 355 Meth/Mat/Exper Sci Ed (4)</td>
<td>EDU 497 Meth: 5-12 Sci (for Science majors)</td>
</tr>
<tr>
<td>MATH 351 Meth/Mat in Math (4); or 2009-10 UMW course: M 341 Meth/Mat/Math (4) (for Math majors)</td>
<td>EDU 497 Meth: 5-12 Math (for Math majors)</td>
</tr>
<tr>
<td>ED 473 Stu Teaching-Secondary</td>
<td>EDU 495 Stu Tchg: 5-12</td>
</tr>
<tr>
<td>--</td>
<td>EDU 306 Schl Law/ Advoc/All Lrnrs</td>
</tr>
</tbody>
</table>

Total Credits: 40

BA: Environmental Sciences Option, Related Area: Biology

Additional credits needed for a second degree in:

<table>
<thead>
<tr>
<th>BS: Secondary Education, Biology Major</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pre-Fall 2009 UMW Course</strong></td>
</tr>
<tr>
<td>BIO 371 Hum Anat/Physiol</td>
</tr>
<tr>
<td>BIO 372 Hum Anat/Physiol</td>
</tr>
<tr>
<td>BIO 450 Evolution</td>
</tr>
</tbody>
</table>

Additional Credits for Biology Major: 8-12

BA: Environmental Sciences Option, Related Area: Geology

Additional credits needed for a second degree in:

<table>
<thead>
<tr>
<th>BS: Secondary Education, Earth Science Major</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pre-Fall 2009 UMW Course</strong></td>
</tr>
<tr>
<td>GEOL 230 Geol/Amer West</td>
</tr>
<tr>
<td>PHYS 239 Phys Meteorol</td>
</tr>
<tr>
<td>PHYS 240 Astronomy</td>
</tr>
</tbody>
</table>

Additional Credits for Earth Science Major: 12

BA: Environmental Sciences Option, Related Area: Applied Mathematical Science

Additional credits needed for a second degree in:

<table>
<thead>
<tr>
<th>BS: Secondary Education, Mathematics Major</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pre-Fall 2009 UMW Course</strong></td>
</tr>
<tr>
<td>COMS 111 Progrm Fund (3)</td>
</tr>
<tr>
<td>MATH 210 Cnptr Math (4)</td>
</tr>
<tr>
<td>MATH 311 Ord Diff Equations</td>
</tr>
<tr>
<td>MATH 341 College Geometry</td>
</tr>
<tr>
<td>MATH 343 Found/Math (if not taken for BA)</td>
</tr>
</tbody>
</table>

Select 1 from the following: 4

| MATH 441 Adv Calculus (4) | M 435 Adv Calculus I (4) |
| MATH 442 Cmplx Varbls (4) | M 472 Intro/Cmplx Analys (4) |
| MATH 443 Abstrct Algebra (4) | M 431 Abstrct Algebra I (4) |
| MATH 444 Adv Nmbr Theory (4) | M 444 Adv Nmbr Theory (4) |

Additional Credits for Mathematics Major: 15-20
Bachelor of Arts:
Literature & Writing Option

Program Mission Statement

The BA: Literature & Writing Option offers students the opportunity to develop superior knowledge and skills in oral and written communications. Graduates are positioned to enter fields including editing, journalism, and public relations, or gain acceptance into graduate school (e.g., MFA). This course of study encourages students to become empowered and astute readers, writers, speakers, and listeners. Moving beyond traditional approaches, students develop their own voices in writing and speaking. Students respond critically and creatively to literatures in seminar formats and small classes. Whether it is an issue of revision or grammar, faculty encourage open inquiry and a critical understanding of the question of interpretation.

A liberal arts education forms the foundation of our present society and culture. The study of literature, the practice of writing, compels people toward self-reflection where they discover not only those possible sites of commonality, but also how important it is to value our differences. Studying literature and writing thus creates a stronger and more civic-minded person, a person more apt to comprehend the complexity of existence. As technology drives us further from our neighbors but closer to those more distant, we need a citizenry informed by tradition but with the courage to create and invent new approaches when necessary. We need a citizenry able to articulate their thoughts formally and informally, in writing and in speech, while acknowledging the importance of diverse opinion to understanding and knowledge.

The BA: Literature & Writing degree emphasizes individuality and the freedom to pursue a history of ideas through a broad and eclectic range of courses. While writing courses prepare students for continued academic success, it is Montana Western’s goal to teach “writing for life,” encouraging writers to apply their craft for both self-articulation and for occupational purposes. Montana Western’s perspective on the study of literature and writing is to both teach and learn through new and innovative processes and foster creative and innovative approaches to learning in the classroom and beyond.

With this degree, students will be able to engage the world more fully, with greater insight and understanding. They will have the ability to nurture their creative spirit and mind, and enjoy life more fully and completely, because they will have learned the skills to engage ideas more deeply and complexity.

Graduate Outcomes

Program graduates will demonstrate:

- an understanding of the primary literary theories that have shaped and continue to shape literature.
- acquaintance with a broad spectrum of literatures and contexts including non-Western literatures.
- an understanding of the experiences of gender, race, and ethnicity reflected in literature.
- familiarity with and appropriate applications of current conventions in research and writing.
- mastery of oral communication for effective interaction with colleagues and the community.
- mastery of key concepts of literary analysis and evaluation.
- praxis in the process of writing, from drafting through revision.

Assessment

The graduate outcomes for the BA: Literature & Writing Option are assessed through graduate/exit surveys, employer surveys, alumni surveys, feedback from internship supervisors, review of collected student-generated exhibits over time, and program self-study and/or reports from external reviews. The assessment plan for the BA: Literature & Writing Option is available on the web at www.umwestern.edu/administration/vcaa/accreditation/accliterature/.
### BA: Literature & Writing Option
#### General Education & Core

**General Education** (page 42)  
**General Education Credits**  31-32

**Literature & Writing Core**  
**Core Credits**  44

<table>
<thead>
<tr>
<th>Pre-Fall 2009/10 UMW Course</th>
<th>OCHE Equivalent Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 204 Creative Writ Wkshp</td>
<td>TBD</td>
</tr>
<tr>
<td>ENG 279 Fund/ Lit Theory</td>
<td>LIT 300 Lit Criticism</td>
</tr>
</tbody>
</table>

Select 1 from the following:  

| ENG 263 Early Amer Voices (4) | LIT 210 Amer Lit I (4) |
| ENG 264 Amer Romance (4)      | LIT 264 Amer Romance (4) |
| ENG 265 Real/Nat/Modern (4)   | LIT 265 Real/Nat/Modern (4) |
| ENG 266 Gen/Conflicts (4)     | LIT 266 Gen/Conflicts (4) |

Select 1 from the following:  

| ENG 273 Oral Tradition (4)   | LIT 273 Oral Tradition (4) |
| ENG 274 Manuscript Trad (4)  | LIT 274 Manuscript Trad (4) |
| ENG 275 Print Culture (4)    | LIT 277 Print Culture (4)  |
| ENG 276 Declining Empire (4) | LIT 276 Declining Empire (4) |

Select 3 from the following:  

| ENG 313 Writ/Publication (4) | WRIT 313 Writ/Publication (4) |
| ENG 314 Editorial Wkshp (4)  | TBD                         |
| ENG 320 Lit in Translation (4)| LIT 302 Lit in Translation (4) |
| ENG 330 Mythology (4)        | LIT 385 Mythology (4)       |
| ENG 339 Literary Regions (4) | LIT 339 Literary Regions (4) |
| ENG 361 Poetry & Thought (4) | LIT 361 Poetry & Thought (4) |
| ENG 362 Sem/Women’s Lit (4)  | LIT 335 Women & Lit (4)     |

Select 4 from the following:  

| ENG 413 Hist/Struc/Natur Lang (4) | TBD |
| ENG 452 Sem/Literary Period (4)   | LIT 494 Sem: Lit Period (4) |
| ENG 453 Genre Seminar (4)         | LIT 494 Sem: Genre (4)      |
| ENG 454 Authors Seminar (4)       | LIT 494 Sem: Maj Authors (4) |
| ENG/DR 455 Shakespeare (4)        | LIT 473 Studies/Shakespeare (4) |
| ENG 479 Sem/Literary Theory (4)   | LIT 494 Studies/Lit Theory (4) |

**Internship/Thesis**  
**Internship/Thesis Credits**  12

Complete 12 credits from the following:  

<table>
<thead>
<tr>
<th>ENG 400 Coop Ed/Intrnshp (V 1-15)</th>
<th>ENG 400 Coop Ed/Intrnshp (V 1-15) or LIT 498 Intern/Coop Ed/Omnibus (V 1-15)</th>
</tr>
</thead>
</table>

**Related Area** (page 45)  
**Related Area Credits**  19-34

Select any one BA: Related Area  

Note: Some Option/Related Area combinations will require completion of additional prerequisites for some classes.

**Electives**  
**Elective Credits**  0-14

Select from any catalog courses (must have advisor’s approval)

**TOTAL CREDITS REQUIRED**  120
### BA: Literature & Writing Option

#### Related Areas

**Creative Writing**

<table>
<thead>
<tr>
<th>Pre-Fall 2009/10 UMW Course</th>
<th>OCHE Equivalent Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 301 Poetry Wkshp&lt;sup&gt;1&lt;/sup&gt;</td>
<td>TBD</td>
<td>4</td>
</tr>
<tr>
<td>ENG 302 Fiction Wkshp&lt;sup&gt;1&lt;/sup&gt;</td>
<td>TBD</td>
<td>4</td>
</tr>
<tr>
<td>ENG 303 Nonfiction Wkshp&lt;sup&gt;1&lt;/sup&gt;</td>
<td>TBD</td>
<td>4</td>
</tr>
</tbody>
</table>

Select 2 from the following:

| ENG 401 Adv Poetry Wkshp (4) | TBD | 4 |
| ENG 402 Adv Fiction Wkshp (4) | TBD | 4 |
| ENG 403 Adv Nonfiction Wkshp (4) | TBD | 4 |

Select 8 credits from the following:

| DR 401 Creative Drama Meth (2) | TBD | 4 |
| DR 466 Storytelling (2) | THTR 435 Storytelling (2) | 4 |
| ENG 313 Writ/Publication (4) | WRIT 313 Writ/Publication | 4 |
| ENG 314 Editorial Workshop (4) | TBD | 4 |
| ENG 361 Poetry & Thought (4) | LIT 361 Poetry & Thought (4) | 4 |
| ENG 453 Genre Seminar (4) | LIT 494 Sem: Genre (4) | 4 |
| ENG 479 Sem/Literary Theory<sup>2</sup> (4) | LIT 479 Studies/Literary Theory<sup>2</sup> (4) | 4 |

**Total Credits** 28

<sup>1</sup> Prereq: ENG 204  
<sup>2</sup> Prereq: ENG 279/LIT 300

**Professional Communications**

| BUS 217 Bus/Elec Comm | TBD | 4 |
| BUS 317 Adv Bus Comm | TBD | 4 |
| ENG 303 Nonfiction Wkshp | TBD | 4 |
| ENG 313 Writ/Publication | WRIT 313 Writ/Publication | 4 |
| ENG 314 Editorial Workshop | TBD | 4 |
| ENG 350 Tech/Profess Comm | WRIT 321 Adv Technical Writing | 4 |

Select 1 from the following:

| ENG 215 Journalism (4) | TBD | 4 |
| ENG 216 Journalism (4) | TBD | 4 |

**Total Credits** 28

**Western Culture**

| ART 211 Art History | TBD | 4 |
| ART 212 Art History II | TBD | 4 |
| HIST 380 Modern Europe | HSTR 326 Contemp Europe | 4 |
| MUS 202 Intro to Music Lit | MUS 202 Intro to Music Lit | 4 |
| MUS 461 Music History | TBD | 4 |

Select 1 from the following:

| ENG 452 Sem/Literary Period (4) | LIT 473 Studies/Shakespeare (4) | 4 |

Select 1 from the following:

| HIST 101 European Civ I (4) | HSTR 101 Western Civ I (4) | 4 |
| HIST 102 European Civ II (4) | HSTR 102 Western Civ II (4) | 4 |

**Total Credits** 28
Bachelor of Arts:
Mathematics Option

Program Mission Statement

The mission of the BA: Mathematics Option is to provide students with the educational background and research experience to obtain employment in a variety of both pure and applied mathematical fields, as well as prepare students to further their education in graduate schools.

Students who graduate with this degree option will be extremely well prepared to compete with peers for careers in either pure or applied mathematics. This degree is ideal for students who wish to pursue careers in biological or ecological modeling, geological modeling, mathematical physics, cryptography, probabilistic modeling, work at private or government research laboratories, and more. In addition, the curriculum of this degree has been designed so that students will be provided with all of the coursework necessary to attend top graduate schools that offer Ph.D. and M.S. programs in pure or applied mathematics.

Although students may select any combination of Option and Related Area, the Related Areas listed for the Mathematics Option allow the student to choose to attain additional coursework in a number of very popular and exciting areas within the mathematical sciences, while still preserving the student’s flexibility to choose a career anywhere within mathematics. The Mathematical Biology, Mathematical Ecology, Mathematical Geology, and Mathematical Physics Related Areas are designed for students who wish to continue their education or seek employment in applied mathematical graduate fields. Each of these Related Areas is designed to provide students with truly interdisciplinary, experiential education in the application of mathematics to a particular field of science. All will involve a substantial amount of modeling work in the scientific area of choice.

All students completing the Mathematics Option are required to complete research in an area of mathematics relevant to their Related Area and write a thesis about it as their capstone experience. This is an extremely important practice in that it provides the students with first-hand experience in what it means to conduct mathematical research. Specifically, it will provide students with authentic experience in interacting with mathematical and scientific peers (such as faculty and other students), conducting reviews of the current and historical literature of their research field, and in crafting well-honed examples of scientific writing and scientific communication. In addition, it is becoming more and more common for graduate programs to look for evidence of an honors or senior thesis when making a decision on whether or not to admit (and fund) a prospective graduate student. The thesis required for Mathematics Option students will fit the bill.

Graduate Outcomes

Program graduates will:

- display an understanding of basic concepts in the diverse fields of either pure or applied mathematics.
- acquire practical experience with research techniques and methods in the mathematical sciences by mastering basic analytical, logical, and/or computational techniques commonly used in asking and answering mathematical questions.
- demonstrate ability to read and understand primary scientific literature in their discipline.
- exhibit ability to write a basic scientific paper.
- acquire real-world experience in mathematics through a senior thesis project.
- demonstrate a broad knowledge of the general variety of mathematical fields that are pursued by mathematicians and at the same time acquire a focused understanding of at least one specific area of pure or applied mathematics.
- demonstrate mastery of oral communication for effective interaction with colleagues and the community.
- demonstrate ability to conduct research both independently and as a team.

Assessment

The graduate outcomes for the BA: Mathematics Option are assessed through the graduate/exit survey, alumni survey, feedback from internship supervisors, review of collected student-generated exhibits over time, and program self-study and/or reports from external reviews. The assessment plan for the BA: Mathematics Option is available on the web at http://www.umwestern.edu/administration/vcaa/accreditation/accmath.
# BA: Mathematics Option

## General Education & Core

### General Education (page 42)

<table>
<thead>
<tr>
<th>Pre-Fall 2009/10 UMW Course</th>
<th>OCHE Equivalent Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 131 Probability</td>
<td>STAT 121 Probability</td>
<td>4</td>
</tr>
</tbody>
</table>

### Mathematics Core

<table>
<thead>
<tr>
<th>Course</th>
<th>Equivalent Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 201 Calculus I</td>
<td>M 171 Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 202 Calculus II</td>
<td>M 172 Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 203 Calculus III</td>
<td>M 273 Multivariable Calculus</td>
<td>4</td>
</tr>
<tr>
<td>MATH 260 Linear Algebra</td>
<td>M 221 Intro/Linear Algebra</td>
<td>4</td>
</tr>
<tr>
<td>MATH 311 Ord Diff Equations</td>
<td>M 274 Intro/Diff Equations</td>
<td>4</td>
</tr>
<tr>
<td>MATH 343 Found/Math</td>
<td>M 343 Found/Math</td>
<td>4</td>
</tr>
</tbody>
</table>

Select 1 from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Equivalent Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMS 111 Program Fund (3)</td>
<td>TBD</td>
<td>3-4</td>
</tr>
<tr>
<td>MATH 210 Cmprtr Math (4)</td>
<td>M 210 Cmptr Math (4)</td>
<td>4</td>
</tr>
</tbody>
</table>

Select 1 from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Equivalent Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 232 Statistics (4)</td>
<td>STAT 217 Int Stats Cncepts (4)</td>
<td>4</td>
</tr>
<tr>
<td>MATH 333 Math Stats (4)</td>
<td>STAT 422 Math Stats (4)</td>
<td>4</td>
</tr>
</tbody>
</table>

Select 1 from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Equivalent Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 401 Determ Modlng (4)</td>
<td>M 414 Determ Models (4)</td>
<td>4</td>
</tr>
<tr>
<td>MATH 433 Stochast Modlng (4)</td>
<td>STAT 433 Stoch Modlng (4)</td>
<td>4</td>
</tr>
</tbody>
</table>

Select 1 from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Equivalent Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 441 Adv Calculus (4)</td>
<td>M 435 Adv Calculus I (4)</td>
<td>4</td>
</tr>
<tr>
<td>MATH 442 Complx Varbls (4)</td>
<td>M 472 Intr/Cmplx Analys (4)</td>
<td>4</td>
</tr>
<tr>
<td>MATH 443 Abstrct Algebra (4)</td>
<td>M 431 Abstrct Algebra I (4)</td>
<td>4</td>
</tr>
<tr>
<td>MATH 444 Adv Nmbr Theory (4)</td>
<td>M 444 Adv Nmbr Theory (4)</td>
<td>4</td>
</tr>
</tbody>
</table>

### Internship/Thesis

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 498 Sr Proj/Thesis</td>
<td>8</td>
</tr>
</tbody>
</table>

### Related Area (page 45)

Select any one BA: Related Area

Note: Some Option/Related Area combinations will require completion of additional prerequisites for some classes.

### Electives

Select from any catalog courses (must have advisor’s approval)

<table>
<thead>
<tr>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>6-23</td>
</tr>
</tbody>
</table>

### Total Credits Required

<table>
<thead>
<tr>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>120</td>
</tr>
</tbody>
</table>
### Mathematical Biology

<table>
<thead>
<tr>
<th>Pre-Fall 2009/10 UMW Course</th>
<th>OCHE Equivalent Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 111 Biology I</td>
<td>BIOB 160 Prin/Living Syst</td>
</tr>
<tr>
<td>CHEM 131 Gen Chemistry</td>
<td>CHMY 141 Coll Chem I</td>
</tr>
<tr>
<td>BIO 255 Cell Biology</td>
<td>BIOB 260 Cell/Molec Biol</td>
</tr>
<tr>
<td>BIO 343 Genetics</td>
<td>BIOB 375 Gen Genetics</td>
</tr>
<tr>
<td>BIO 450 Evolution</td>
<td>BIOB 420 Evolution</td>
</tr>
</tbody>
</table>

Select 1 from the following. Course may not be applied to the Mathematics Option Core:

<table>
<thead>
<tr>
<th>MATH 401 Determ Modling (4)</th>
<th>M 414 Determ Models (4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 433 Stochast Modling (4)</td>
<td>STAT 433 Stoch Mdlng (4)</td>
</tr>
</tbody>
</table>

Select 1 from the following. Course may be applied to the Mathematics Option Core:

<table>
<thead>
<tr>
<th>MATH 441 Adv Calculus (4)</th>
<th>M 435 Adv Calculus I (4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 442 Cmplx Variables (4)</td>
<td>M 472 Intro/Cmplx Anlys (4)</td>
</tr>
</tbody>
</table>

Select 2 from the following:

<table>
<thead>
<tr>
<th>BIO 262 Microbiology (4)</th>
<th>BIOM 260 Gen Microbiol (4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 425 Molecular Biology (4)</td>
<td>BIOB 425 Adv Cell/Mol Biol (4)</td>
</tr>
<tr>
<td>BIO/MATH 331 Bioformat (4)</td>
<td>STAT 331 Bioformat (4)</td>
</tr>
<tr>
<td>CHEM 441 Biochemistry (4)</td>
<td>TBD</td>
</tr>
</tbody>
</table>

**Total Credits**: 24-28

### Mathematical Geology

<table>
<thead>
<tr>
<th>Pre-Fall 2009/10 UMW Course</th>
<th>OCHE Equivalent Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 131 Gen Chemistry</td>
<td>CHMY 141 Coll Chem I</td>
</tr>
<tr>
<td>GEO 101 Intro/Geology (4)</td>
<td>GEO 101 Intro/Phys Geol (4)</td>
</tr>
<tr>
<td>GEO 150 Envtd Geology (4)</td>
<td>GEO 103 Int/Envtl Geol (4)</td>
</tr>
</tbody>
</table>

Select 1 from the following. Course may not be applied to the Mathematics Option Core:

<table>
<thead>
<tr>
<th>MATH 401 Determ Modling (4)</th>
<th>M 414 Determ Models (4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 433 Stochast Modling (4)</td>
<td>STAT 433 Stoch Mdlng (4)</td>
</tr>
</tbody>
</table>

Select 1 from the following. Course may be applied to the Mathematics Option Core:

<table>
<thead>
<tr>
<th>MATH 441 Adv Calculus (4)</th>
<th>M 435 Adv Calculus I (4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 442 Cmplx Variables (4)</td>
<td>M 472 Intro/Cmplx Anlys (4)</td>
</tr>
<tr>
<td>MATH 443 Abstrct Algebra (4)</td>
<td>M 431 Abstrct Algbra I (4)</td>
</tr>
<tr>
<td>MATH 444 Adv Nmbr Theory (4)</td>
<td>M 444 Adv Nmbr Theory (4)</td>
</tr>
</tbody>
</table>

Select 3 from the following:

<table>
<thead>
<tr>
<th>GEO 330 Struct/Tectonics (4)</th>
<th>GEO 315 Strctrl Geol (4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEO 378 Surficial Process (4)</td>
<td>GEO 378 Surf Process (4)</td>
</tr>
<tr>
<td>GEO 431 Env Geochem (4)</td>
<td>TBD</td>
</tr>
<tr>
<td>GEO 432 Depos Envts (4)</td>
<td>GEO 309 Sed/Stratigraphy (4)</td>
</tr>
<tr>
<td>GEO 480 Hydrogeology (4)</td>
<td>GEO 421 Hydrology (4)</td>
</tr>
</tbody>
</table>

**Total Credits**: 24-28

### Mathematical Physics

<table>
<thead>
<tr>
<th>Pre-Fall 2009/10 UMW Course</th>
<th>OCHE Equivalent Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 233 Gen Physics</td>
<td>PHSX 220 Physics I</td>
</tr>
<tr>
<td>PHYS 234 Gen Physics</td>
<td>PHSX 222 Physics II</td>
</tr>
<tr>
<td>PHYS 235 Gen Physics III</td>
<td>PHSX 224 Physics III</td>
</tr>
<tr>
<td>PHYS 340 Topics/Mod Physics: Mechanics</td>
<td>TBD</td>
</tr>
<tr>
<td>PHYS 401 Topics/Mod Physics: Intro/Quantum Mechanics</td>
<td>TBD</td>
</tr>
</tbody>
</table>

Select 1 from the following. Course may not be applied to the Mathematics Option Core:

<table>
<thead>
<tr>
<th>MATH 401 Determ Modling (4)</th>
<th>M 414 Determ Models (4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 433 Stochast Modling (4)</td>
<td>STAT 433 Stoch Mdlng (4)</td>
</tr>
</tbody>
</table>

Select 1 from the following. Course may be applied to the Mathematics Option Core:

<table>
<thead>
<tr>
<th>MATH 441 Adv Calculus (4)</th>
<th>M 435 Adv Calculus I (4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 442 Cmplx Variables (4)</td>
<td>M 472 Intro/Cmplx Anlys (4)</td>
</tr>
<tr>
<td>MATH 443 Abstrct Algebra (4)</td>
<td>M 431 Abstrct Algbra I (4)</td>
</tr>
<tr>
<td>MATH 444 Adv Nmbr Theory (4)</td>
<td>M 444 Adv Nmbr Theory (4)</td>
</tr>
</tbody>
</table>

**Total Credits**: 24
Bachelor of Arts: 
Social Science Option

Program Mission Statement

The mission of the B.A. Social Science Option is to establish a multidisciplinary foundation for focused study in one of the Related Areas offered by the department. Together, the Option and a departmental Related Area are intended to prepare students for entry into graduate or professional programs.

Graduate Outcomes

- HISTORY – Graduates learn to think historically, meaning: understanding the importance of chronology in determining cause and effect relationships between events; developing an ability to effectively compare the effects of similar events in different contexts (recognizing how the past and present are connected); and developing the ability to effectively compare and evaluate varied interpretations of the same events or issues.
- POLITICAL SCIENCE – Graduates demonstrate a comprehension of and ability to apply political thinking, defined as the ability to interpret the concepts of government, knowledge, and subjectivity, supported by the use of legal, historical, and sociological evidence to pose and answer questions relating to the distribution and exercise of power as well as the evaluation of how power should be distributed and exercised.
- PSYCHOLOGY – Graduates demonstrate an understanding of social psychology as the scientific study of the thoughts, actions, and interactions of individuals as they are affected by the actual, implied, or imagined presence of others.
- SOCIOLOGY – Graduates demonstrate a comprehension of human groups and how they develop, how they are structured, and how they function.
- Graduates possess written and oral communication skills necessary to demonstrate problem-solving and technological skills consistent with the objectives of the Social Science Option.
- Graduates can demonstrate the ability to carry out independent, original scholarly work, which includes the ability to identify and formulate problem statements appropriate to the academic discipline, select matching investigation methods, and collect, analyze, and interpret information.

Assessment

The graduate outcomes for the BA: Social Science Option are assessed through the graduate/exit survey, alumni survey, feedback from internship supervisors, review of collected student-generated exhibits over time, and program self-study and/or reports from external reviews. The assessment plan for the BA: Social Science Option is available on the web at http://www.umwestern.edu/administration/vcaa/accreditation/accsocial/.
## BA: Social Science Option
### General Education & Core

**General Education** (page 42)  
**General Education Credits**  31-32

**Social Science Core**  
**Core Credits**  36

<table>
<thead>
<tr>
<th>Pre-Fall 2009/10 UMW Course</th>
<th>OCHE Equivalent Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select 1 from the following:</td>
<td>4</td>
</tr>
<tr>
<td>PSY 221 Quant Meth/Soc Sci (4)</td>
<td>PSYX 203 Intr/Soc Sci Resch Meth (4)</td>
</tr>
<tr>
<td>ECON/GEOG/POLS 201 World Econ</td>
<td>SSS 201 World Economy</td>
</tr>
<tr>
<td>POLS 250 Political Theory</td>
<td>PSCI 250 Intro/Political Theory</td>
</tr>
<tr>
<td>PSY 452 Social Psych/Group Dynam</td>
<td>PSCI 360 Social Psych</td>
</tr>
<tr>
<td>SOC 425 MT Indian Sovereignty</td>
<td>SSS 425 MT Indian Sovereignty</td>
</tr>
<tr>
<td>Select 1 from the following:</td>
<td>4</td>
</tr>
<tr>
<td>HIST 452 Europ Intellec Hist (4)</td>
<td>HIST 423 Europ Intell Hist (4)</td>
</tr>
<tr>
<td>HIST 456 US Cultural Hist (4)</td>
<td>HSTA 412 Amer Thought/Clt (4)</td>
</tr>
</tbody>
</table>

Select two 300- or 400-level HPSS courses  
(that are not required in selected Related Area)  
8

Select 1 from the following:  
(that is not required in selected Related Area)  
4

<table>
<thead>
<tr>
<th>ANTH 409 Seminar (4)</th>
<th>TBD</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 409 Seminar (4)</td>
<td>HSTA 494 Sem/Wkshop (4) or HSTR 494 Sem/Wkshop (4)</td>
</tr>
<tr>
<td>POLS 409 Seminar (4)</td>
<td>PSCI 494 Sem/Wkshop (4)</td>
</tr>
<tr>
<td>PSY 409 Seminar (4)</td>
<td>PSYX 494 Sem/Wkshop (4)</td>
</tr>
<tr>
<td>SOC 409 Seminar (4)</td>
<td>SOCI 494 Sem/Wkshop (4)</td>
</tr>
</tbody>
</table>

**Internship/Thesis**  
**Internship/Thesis Credits**  6-12

<table>
<thead>
<tr>
<th>Complete 6-12 credits from:</th>
<th>6-12</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH/GEOG/HIST/POLS/PSY/SOC 400 Coop Ed/Intrmshp (V 1-15)</td>
<td>ANTH 400 Coop Ed/Intern (V 1-15) or GPHY/HSTA/HSTR/PSCI/PSYX/SOCI 498 Intrm/Coop Ed/Omnibus (V 1-15)</td>
</tr>
<tr>
<td>ANTH/GEOG/HIST/POLS/PSY/SOC 498 Sr Proj/Theiss (V 1-15)</td>
<td>ANTH 498 SrProj/Theiss (V 1-15) or GPHY/HSTA/HSTR/PSCI/PSYX/SOCI 499 SrProj/Theiss (V 1-15)</td>
</tr>
</tbody>
</table>

**Related Area**  
**Related Area Credits**  19-34

Select any one BA: Related Area  
19-34

Note: Some Option/Related Area combinations will require completion of additional prerequisites for some classes.

**Electives**  
**Elective Credits**  6-28

Select from any catalog courses (must have advisor’s approval)  
2-24

**TOTAL CREDITS REQUIRED**  120
## BA: Social Science Option

### Related Areas

#### Anthropology

<table>
<thead>
<tr>
<th>Pre-Fall 2009/10 UMW Course</th>
<th>OCHE Equivalent Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 105 Intro/Cultural Anthro</td>
<td>TBD</td>
</tr>
<tr>
<td>ANTH 315 Political Sociol</td>
<td>YSS 315 Polit Anthro/Sociol</td>
</tr>
<tr>
<td>ANTH 336 Multicultural Identy</td>
<td>TBD</td>
</tr>
<tr>
<td>ANTH 409 Seminar</td>
<td>ANTH 494 Sem/Wkshop or HIST 494 Sem/Wkshop</td>
</tr>
<tr>
<td>ANTH 475 Cultural Ecology</td>
<td>YSS 475 Cultural Ecology</td>
</tr>
<tr>
<td>ANTH 484 Economic Sociol</td>
<td>YSS 484 Econ Anthro/Sociol</td>
</tr>
<tr>
<td>ANTH 485 Gndr/Econ/Soc Chng</td>
<td>YSS 485 Gndr/Econ/Soc Chng</td>
</tr>
</tbody>
</table>

**Total Credits** 28

#### History

<table>
<thead>
<tr>
<th>HIST 371 MT/American West</th>
<th>YSTA 353 MT/American West</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 409 Seminar</td>
<td>YSTA 494 Sem/Wkshop or HIST 494 Sem/Wkshop</td>
<td>4</td>
</tr>
<tr>
<td>POLS 313 Intnl Rel/Amer Diplcy</td>
<td>PSCI 331 Intnl Rel Theory</td>
<td>4</td>
</tr>
</tbody>
</table>

**Select 1 from the following:** 4

| HIST 225 Africa/Middle East (4) | YSTR 260 Africa/Mid East (4) | 4 |
| HIST 240 History/ Far East (4) | YSTR 255 Hist/Far East (4) | 4 |

**Total Credits** 24

#### Political Science

<table>
<thead>
<tr>
<th>POLS 121 Amer Natl/State Govt</th>
<th>YSS 121 Amer Natl/State Govt</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLS 409 Seminar</td>
<td>PSCI 494 Seminar/Wkshp</td>
<td>4</td>
</tr>
<tr>
<td>POLS 313 Intnl Rel/Amer Dipl</td>
<td>PSCI 331 Intnl Rel Theory</td>
<td>4</td>
</tr>
<tr>
<td>POLS 321 Compar Politics</td>
<td>YSS 321 Compar Politics</td>
<td>4</td>
</tr>
<tr>
<td>POLS 341 Political Economy</td>
<td>YSS 341 Political Economy</td>
<td>4</td>
</tr>
<tr>
<td>POLS 470 Constit Law</td>
<td>PSCI 471 Amer Constit Law</td>
<td>4</td>
</tr>
<tr>
<td>SOC/ANTH 315 Political Sociol</td>
<td>YSS 315 Polit Anthro/Sociol</td>
<td>4</td>
</tr>
</tbody>
</table>

**Total Credits** 28

#### Pre-Law

<table>
<thead>
<tr>
<th>POLS 121 Amer Natl/State Govt</th>
<th>YSS 121 Amer Natl/State Govt</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLS 321 Compar Politics</td>
<td>YSS 321 Compar Politics</td>
<td>4</td>
</tr>
<tr>
<td>POLS 470 Constit Law</td>
<td>PSCI 471 Amer Constit Law</td>
<td>4</td>
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</tbody>
</table>

**Select 1 from the following:** 4

| Any 300- or 400-level HIST course | Any 300- or 400-level HIST/HSTA/INTR course | 4 |
| Any 300- or 400-level ANTH or SOC course | Any 300- or 400-level ANTH or SOC/SOCI course | 4 |

**Select 1 from the following:** 4

| Any 300- or 400-level PSY course | Any 300- or 400-level PSY/PSYX course | 4 |

**Select 1 from the following:** 4

<table>
<thead>
<tr>
<th>ANTH 409 Seminar (4)</th>
<th>ANTH 494 Sem/Wkshop (4)</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 409 Seminar (4)</td>
<td>YSTA 494 Sem/Wkshop (4) or HIST 494 Sem/Wkshop (4)</td>
<td>4</td>
</tr>
<tr>
<td>POLS 409 Seminar (4)</td>
<td>PSCI 494 Sem/Wkshop (4)</td>
<td>4</td>
</tr>
<tr>
<td>PSY 409 Seminar (4)</td>
<td>PSYX 494 Sem/Wkshop (4)</td>
<td>4</td>
</tr>
<tr>
<td>SOC 409 Seminar (4)</td>
<td>YSS 494 Sem/Wkshop (4)</td>
<td>4</td>
</tr>
</tbody>
</table>

**Total Credits** 28

#### Psychology

<table>
<thead>
<tr>
<th>Pre-Fall 2009/10 UMW Course</th>
<th>OCHE Equivalent Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 201 Intro/Cognition</td>
<td>PSYX 280 Fund/Memory/Cognition</td>
</tr>
<tr>
<td>PSY 265 Intro/Motiv: Theory/Pract</td>
<td>PSYX 366 Motiv:Theory/Pract</td>
</tr>
<tr>
<td>PSY 275 Develop Psych</td>
<td>PSYX 230 Develop Psych</td>
</tr>
<tr>
<td>PSY 300 Quant Rasch Meth/Behav Sci</td>
<td>PSYX 322 Qnt Rasch Meth/BhvSci</td>
</tr>
<tr>
<td>PSY 437 Psych of Personality</td>
<td>PSYX 385 Psych of Personality</td>
</tr>
<tr>
<td>PSY 438 Abnormal Psych</td>
<td>PSYX 440 Abnorm Psych/Rarch</td>
</tr>
</tbody>
</table>

**Select 1 from the following:** 4

| PSY 203 Comparative Psych (4) | PSYX 252 Fund/Comp Psych (4) | 4 |
| PSY 360 Learning/Memory (4) | PSYX 270 Fund Psych/Lrning (4) | 4 |

**Total Credits** 28

#### Restorative Justice

<table>
<thead>
<tr>
<th>ANTH 336 Multiculti Identity</th>
<th>TBD</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC 300 Sociology/Family</td>
<td>SOCI 332 Sociology/Family</td>
<td>4</td>
</tr>
<tr>
<td>SOC 310 Restorative Justice</td>
<td>SOCI 317 Restorative Justice</td>
<td>4</td>
</tr>
<tr>
<td>SOC 320 Mediation</td>
<td>SOCI 360 Mediation</td>
<td>4</td>
</tr>
</tbody>
</table>

**Select 1 from the following:** 4

| POLS 313 Intnl Rel/Amer Diplcy (4) | PSCI 331 Intnl Rel Theor (4) | 4 |
| POLS 321 Compar Politics (4) | YSS 321 Compar Politics (4) | 4 |
| POLS 470 Constit Law (4) | PSCI 471 Amer Constit Law (4) | 4 |

**Course not taken in the Core:** 4

| POLS 250 Political Theory (4) | PSCI 250 Intro/Polit Theory (4) | 4 |
| SOCI 305 Social Theory (4) | YSS 305 Soc/Anthro Theory (4) | 4 |

**Select 1 from the following:** 4

| PSY/SOC 452 Social Psych (4) | PSYX 360 Soc Psych (4) | 4 |
| SOCI 450 Social Stratif (4) | YSS 450 Social Stratif (4) | 4 |
| SOC/ANTH 475 Cultural Ecol (4) | YSS 475 Cultural Ecol (4) | 4 |

**Total Credits** 28

#### Society & Culture

<table>
<thead>
<tr>
<th>POLS 121 Compar Politics</th>
<th>YSS 321 Compar Politics</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC/ANTH 315 Political Sociol</td>
<td>YSS 315 Polit Anthro/Sociol</td>
<td>4</td>
</tr>
<tr>
<td>SOC 409 Seminar</td>
<td>SOCI 494 Seminar/Wkshp</td>
<td>4</td>
</tr>
<tr>
<td>SOC/ANTH 475 Cultural Ecology</td>
<td>YSS 475 Cultural Ecology</td>
<td>4</td>
</tr>
<tr>
<td>SOC/ANTH 484 Econ Sociol</td>
<td>YSS 484 Econ Anthro/Sociol</td>
<td>4</td>
</tr>
<tr>
<td>SOC/ANTH 485 Gndr/Econ/Soc Chng</td>
<td>YSS 485 Gndr/Econ/Soc Chng</td>
<td>4</td>
</tr>
</tbody>
</table>

**Course not taken in the Core:** 4

| POLS 250 Political Theory (4) | PSCI 250 Intro/Polit Theory (4) | 4 |
| SOCI 305 Social Theory (4) | YSS 305 Soc/Anthro Theory (4) | 4 |

**Total Credits** 28

#### Sociology

<table>
<thead>
<tr>
<th>SOC 305 Social Theory</th>
<th>YSS 305 Soc/Anthro Theory</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC 315 Political Sociol</td>
<td>YSS 315 Polit Anthro/Sociol</td>
<td>4</td>
</tr>
<tr>
<td>SOC 409 Seminar</td>
<td>SOCI 494 Seminar/Wkshp</td>
<td>4</td>
</tr>
<tr>
<td>SOC/ANTH 475 Cultural Ecology</td>
<td>YSS 475 Cultural Ecology</td>
<td>4</td>
</tr>
<tr>
<td>SOC/ANTH 484 Econ Sociol</td>
<td>YSS 484 Econ Anthro/Sociol</td>
<td>4</td>
</tr>
<tr>
<td>SOC/ANTH 485 Gndr/Econ/Soc Chng</td>
<td>YSS 485 Gndr/Econ/Soc Chng</td>
<td>4</td>
</tr>
</tbody>
</table>

**Total Credits** 24
## BA: Social Science Option
### Related Areas

### Women’s Studies

<table>
<thead>
<tr>
<th>Pre-Fall 2009/10 UMW Course</th>
<th>OCHE Equivalent Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 362 Seminar/Women’s Lit</td>
<td>LIT 335 Women &amp; Lit</td>
<td>4</td>
</tr>
<tr>
<td>ENG 479 Seminar/Lit Theory</td>
<td>LIT 479 Studies/Lit Theory</td>
<td>4</td>
</tr>
<tr>
<td>HIST 370 Women’s History</td>
<td>HSTA 386 Women’s History</td>
<td>4</td>
</tr>
<tr>
<td>PSY/SOC 452 Social Psych</td>
<td>PSYX 360 Social Psych</td>
<td>4</td>
</tr>
<tr>
<td>SOC/ANTH 485 Gndr/Econ/Soc Chang</td>
<td>ISSS 485 Gndr/Econ/Soc Chang</td>
<td>4</td>
</tr>
</tbody>
</table>

Select 1 from the following:

<table>
<thead>
<tr>
<th>Pre-Fall 2009/10 UMW Course</th>
<th>OCHE Equivalent Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 263 US Since 1945 (4)</td>
<td>HSTA 215 Post-WWII Amer (4)</td>
<td>4</td>
</tr>
<tr>
<td>HIST 362 African-Amer Hist (4)</td>
<td>HISTA 341 Afric-Amer Hist (4)</td>
<td>4</td>
</tr>
</tbody>
</table>

Course not taken in the Core:

<table>
<thead>
<tr>
<th>Pre-Fall 2009/10 UMW Course</th>
<th>OCHE Equivalent Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLS 250 Political Theory (4)</td>
<td>PSYX 250 Intro/Polit Theory (4)</td>
<td>4</td>
</tr>
<tr>
<td>SOC 305 Social Theory (4)</td>
<td>ISSS 305 Soc/Anthro Theory (4)</td>
<td>4</td>
</tr>
</tbody>
</table>

Select 1 from the following:

<table>
<thead>
<tr>
<th>Pre-Fall 2009/10 UMW Course</th>
<th>OCHE Equivalent Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC 425 MT Indian Sovrnty (4)</td>
<td>ISSS 425 MT Indian Sovrnty (4)</td>
<td>4</td>
</tr>
<tr>
<td>SOC 450 Social Stratification (4)</td>
<td>ISSS 450 Social Stratif (4)</td>
<td>4</td>
</tr>
<tr>
<td>SOC/ANTH 484 Econ Social (4)</td>
<td>ISSS 484 Econ Anthro/Social (4)</td>
<td>4</td>
</tr>
</tbody>
</table>

Total Credits: 32
Bachelor of Arts:
Visual Arts Option

Program Mission Statement

The mission of the BA: Visual Arts Option is to provide education to those seeking personal enrichment and/or career opportunities related to the visual arts, including practicing studio artists and employees of art galleries, museums, and community arts centers, and provide educational preparation for those seeking continued graduate study in the visual arts.

Graduate Outcomes

Program graduates will demonstrate:

- skill with more than one artistic medium.
- understanding and use of vocabulary and theories of visual design.
- understanding of how art and artists reflect their culture or historical context.
- the use of electronic technologies to research art, artists, or create art.
- the ability to create artwork that visually communicates an idea and/or feeling to others.
- the ability to write about artists, about art history, and art criticism.
- the ability to discern the potential content of artwork.

Assessment

The graduate outcomes for the BA: Visual Arts Option are assessed through the graduate/exit survey, employer survey, alumni survey, feedback from internship supervisors, review of collected student-generated exhibits over time, and program self-study and/or reports from external reviews. The assessment plan for the BA: Visual Arts Option is available on the web at http://www.umwestern.edu/administration/vcaa/accreditation/accvisual/.
### BA: Visual Arts Option

#### General Education & Core

**General Education** (page 42)

<table>
<thead>
<tr>
<th>Pre-Fall 2009 UMW Course</th>
<th>OCHE Equivalent Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 140 Color &amp; Design</td>
<td>TBD</td>
<td>4</td>
</tr>
<tr>
<td>ART 141 Drawing</td>
<td>TBD</td>
<td>4</td>
</tr>
<tr>
<td>ART 211 Art History I</td>
<td>TBD</td>
<td>4</td>
</tr>
<tr>
<td>ART 212 Art History II</td>
<td>TBD</td>
<td>4</td>
</tr>
<tr>
<td>ART 271 Sculpture</td>
<td>TBD</td>
<td>4</td>
</tr>
</tbody>
</table>

In consultation with advisor, select two 2-D courses, one 3-D course, and one additional 200-level studio elective from the following:

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 170 Intro/Photography [2-D]</td>
<td>TBD</td>
</tr>
<tr>
<td>ART 225 Digital Media [2-D]</td>
<td>TBD</td>
</tr>
<tr>
<td>ART 231 Ceramics [3-D]</td>
<td>TBD</td>
</tr>
<tr>
<td>ART 243 Printmaking [2-D]</td>
<td>TBD</td>
</tr>
<tr>
<td>ART 247 Glass [3-D]</td>
<td>TBD</td>
</tr>
<tr>
<td>ART 261 Watercolor [2-D]</td>
<td>TBD</td>
</tr>
<tr>
<td>ART 267 Painting [2-D]</td>
<td>TBD</td>
</tr>
<tr>
<td>ART 270 Photography [2-D]</td>
<td>TBD</td>
</tr>
<tr>
<td>ART 277 Fibers [3-D]</td>
<td>TBD</td>
</tr>
<tr>
<td>Two 300-level Art courses</td>
<td>TBD</td>
</tr>
</tbody>
</table>

**Total Credits Required:** 120

**General Education Credits:** 31-32

**Core Credits:** 44

**Internship/Thesis**

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 499 Art Exhibit &amp; Thesis</td>
<td>TBD</td>
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</tbody>
</table>

Students may additionally complete:

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 400 Coop Ed/Internship (V 1-15)</td>
<td>TBD</td>
</tr>
<tr>
<td>ART 498 Sr Project/Thesis (V 1-15)</td>
<td>TBD</td>
</tr>
</tbody>
</table>

**Internship/Thesis Credits:** 4-12

**Related Area** (page 45)

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Credits</th>
</tr>
</thead>
</table>

Select any one BA: Related Area

**Related Area Credits:** 19-34

**Electives**

Select from any catalog courses (must have advisor’s approval)

**Elective Credits:** 0-22

**TOTAL CREDITS REQUIRED:** 120
### BA: Visual Arts Option

#### Related Areas

<table>
<thead>
<tr>
<th>Pre-Fall 2009 UMW Course</th>
<th>OCHE Equivalent Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 201 Small Bus Development</td>
<td>TBD</td>
<td>3</td>
</tr>
<tr>
<td>BUS 217 Bus/Elec Comm</td>
<td>TBD</td>
<td>4</td>
</tr>
<tr>
<td>BUS 241 Financial Acctng</td>
<td>CTG 201 Prin/Fin Acctng</td>
<td>3</td>
</tr>
<tr>
<td>BUS 280 Bus Law</td>
<td>TBD</td>
<td>4</td>
</tr>
<tr>
<td>COMS 115 Comp Basics/Educators</td>
<td>TBD</td>
<td>4</td>
</tr>
<tr>
<td>ECON 250 Prin/Economics</td>
<td>ECNS 203 Prin/Micro/Macro</td>
<td>4</td>
</tr>
</tbody>
</table>

Select 1 from the following:

| BUS 325 Prin/Prac/Mgt (3)      | TBD                    | 3       |
| BUS 329 Human Res Mgt (3)      | TBD                    |         |

**Total Credits** 25

#### Illustration

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ART 225 Digital Media</td>
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</tr>
<tr>
<td>ART 325 Digital Media II</td>
<td>4</td>
</tr>
<tr>
<td>ART 328 Illustration</td>
<td>4</td>
</tr>
<tr>
<td>ART 428 Adv Stu: Illustration</td>
<td>4</td>
</tr>
<tr>
<td>BUS 201 Small Bus Development</td>
<td>3</td>
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</table>

**Total Credits** 19

#### Pre-Art Therapy

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>PSY 201 Intro/Cognition</td>
<td>4</td>
</tr>
<tr>
<td>PSY 275 Develop Psych</td>
<td>4</td>
</tr>
<tr>
<td>PSY 452 Soc Psych/Grp Dyn</td>
<td>4</td>
</tr>
<tr>
<td>PSY 437 Psych/Personality</td>
<td>4</td>
</tr>
<tr>
<td>PSY 438 Abnormal Psych</td>
<td>4</td>
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</table>

**Total Credits** 20

#### Studio Art

In consultation with advisor, select 20 credits from the following courses, including at least 12 credits in Advanced Studio:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 325 Digital Media II</td>
<td>4</td>
</tr>
<tr>
<td>ART 331 Ceramics II</td>
<td>4</td>
</tr>
<tr>
<td>ART 341 Drawing II</td>
<td>4</td>
</tr>
<tr>
<td>ART 342 Human Figure</td>
<td>4</td>
</tr>
<tr>
<td>ART 343 Printmaking II</td>
<td>4</td>
</tr>
<tr>
<td>ART 347 Glass II</td>
<td>4</td>
</tr>
<tr>
<td>ART 367 Painting II</td>
<td>4</td>
</tr>
<tr>
<td>ART 371 Sculpture II</td>
<td>4</td>
</tr>
<tr>
<td>ART 377 Fibers II</td>
<td>4</td>
</tr>
<tr>
<td>ART 381 Art Media Wkshp</td>
<td>4</td>
</tr>
<tr>
<td>ART 425-477 Adv Studio</td>
<td>4</td>
</tr>
</tbody>
</table>

**Total Credits** 20
## Bachelor of Arts
### Other Available Related Areas

#### Drama Related Area

**General Education**
- For Humanities: Literary & Artistic Studies category:
  - FA 101 Intro to Visual & Performing Arts 4

<table>
<thead>
<tr>
<th>Pre-Fall 2009/10 UMW Course</th>
<th>OCHE Equivalent Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>DR 243 Stagecraft/Costumes</td>
<td>THTR 202 Stgcrft I: Light/Costumes 4</td>
</tr>
<tr>
<td>DR 276 Acting Fund/Styles</td>
<td>THTR 120 Intro/Acting I 4</td>
</tr>
<tr>
<td>DR 441 Drama Hist/Lit Genre</td>
<td>TBD 4</td>
</tr>
<tr>
<td>ENGS 280 Visions/america</td>
<td>LIT 218 Visions/america 4</td>
</tr>
<tr>
<td>ENG/DR 455 Shakespeare</td>
<td>LIT 473 Stdies/Shakespeare 4</td>
</tr>
<tr>
<td>FA 310 Contemp Arts Issues</td>
<td>TBD 4</td>
</tr>
</tbody>
</table>

Select 2-4 credits from the following:
- 2-4

<table>
<thead>
<tr>
<th>DR 217 Theatre Prac (V 1-2)</th>
<th>THTR 205 Thtr Wkshp II (V 1-2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DR 241 Play Prod/Intro/Dir (4)</td>
<td>THTR 276 Play Prod/Intro/Dir (4)</td>
</tr>
<tr>
<td>DR 346 Drama/Youth (2)</td>
<td>TBD</td>
</tr>
<tr>
<td>DR 401 Crety Drama Meth (2)</td>
<td>THTR 338 Drama/Youth (2)</td>
</tr>
<tr>
<td>DR 466 Storytelling (2)</td>
<td>THTR 435 Storytelling (2)</td>
</tr>
<tr>
<td>DR/ED/ENG 291/391/491 Film Courses (1-3)</td>
<td>TBD</td>
</tr>
</tbody>
</table>

**Total Credits:** 26-28

#### Music Related Area

<table>
<thead>
<tr>
<th>Pre-Fall 2009/10 UMW Course</th>
<th>OCHE Equivalent Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 115 Beg Guitar</td>
<td>MUSI 160 Beg Guitar    2</td>
</tr>
<tr>
<td>MUS 131 Music Theory I (2)</td>
<td>MUSI 107 Music Thry / Aural Percep (4) 4</td>
</tr>
<tr>
<td>MUS 141 Applied Musshp I (2)</td>
<td>MUSI 142 Applied Musshp II (2)</td>
</tr>
<tr>
<td>MUS 132 Music Theory II (2)</td>
<td>MUSI 109 Music Thry II/ Aural Percep (4) 4</td>
</tr>
<tr>
<td>MUS 142 Applied Musshp II (2)</td>
<td>MUSI 152 Voice in Class</td>
</tr>
<tr>
<td>MUS 162 Voice in Class</td>
<td>TBD</td>
</tr>
<tr>
<td>MUS 20 Intro/Music Lit</td>
<td>TBD</td>
</tr>
<tr>
<td>MUS 461 Music History</td>
<td>TBD</td>
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</tbody>
</table>

Select 2 credits from the following:
- 2

| MUS 316 Concert Band² (1)   | MUSI 314 Band III: UMW Concert Band² (1)  |
| MUS 365 Vocal Ensemble² (1) | MUSI 312 Choir III: UMW² |

**Total Credits:** 24

#### Visual Arts Related Area

(Not to be taken with BA: Visual Arts Option)

<table>
<thead>
<tr>
<th>Pre-Fall 2009/10 UMW Course</th>
<th>OCHE Equivalent Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 140 Color &amp; Design</td>
<td>TBD</td>
</tr>
</tbody>
</table>

Select 1 from the following:
- 4

| ART 211 Art History I (4)   | TBD                    |
| ART 212 Art History II (4)  | TBD                    |

In consultation with advisor, select 1 from the following:
- 4

| ART 141 Drawing (4)                | TBD                    |
| ART 170 Intro/Photog [2-D] (4)     | TBD                    |
| ART 225 Digital Media [2-D] (4)    | TBD                    |
| ART 231 Ceramics [3-D] (4)         | TBD                    |
| ART 243 Printmaking [2-D] (4)      | TBD                    |
| ART 247 Glass [3-D] (4)            | TBD                    |
| ART 261 Watercolor [2-D] (4)       | TBD                    |
| ART 267 Painting [2-D] (4)         | TBD                    |
| ART 271 Sculpture (4)              | TBD                    |
| ART 277 Fibers [3-D] (4)           | TBD                    |

One 300-level studio course in same medium selected above 4
One 400-level Adv Studio course in same medium selected above 4

**Total Credits:** 20

1. With instructor approval
2. Repeatable
The Associate of Arts (AA) degree is a two-year general transfer degree, typically with an emphasis in the humanities or social sciences. It is recommended for students who expect to transfer to a four-year program and work toward a Bachelor of Arts degree. It is also recommended for students who do not expect to work toward a baccalaureate degree but who wish an extension of their general education. A student in good standing in the Associate of Arts degree program may transfer to a bachelor’s degree program with little, if any, loss of time. Students who intend to transfer into a bachelor’s degree program at UMW or another college/university should plan their program carefully. Students are encouraged to determine their education goal and the institution to which they will transfer as early as possible and request a copy of the transfer institution’s catalog for use in course selection while at Montana Western. The courses to be included in this program must be chosen carefully by the individual in consultation with and approval by the UMW faculty advisor and the appropriate staff at the institution to which the student will transfer. Students who complete the entire General Education program required for bachelor’s degrees at UMW will have met the lower division General Education requirements at any/all Montana University System institutions.

Students completing the AA degree are encouraged to complete their General Education requirements in the first year of the program. In the second year, students complete interest area courses and electives.

**General Education (page 42)**

<table>
<thead>
<tr>
<th>Area of Interest</th>
<th>Complete 20 credits in no more than two of the following areas:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anthropology</td>
<td>Fine Arts</td>
</tr>
<tr>
<td>Art</td>
<td>Geography</td>
</tr>
<tr>
<td>Business</td>
<td>History</td>
</tr>
<tr>
<td>Drama</td>
<td>Music</td>
</tr>
<tr>
<td>Education</td>
<td>Psychology</td>
</tr>
<tr>
<td>English</td>
<td>Sociology</td>
</tr>
<tr>
<td>Equine Studies</td>
<td></td>
</tr>
</tbody>
</table>

**General Education Credits** 31-32

**Interest Area Credits** 20

**Electives**

Select 8-9 credits from any catalog courses

**Elective Credits** 8-9

**TOTAL CREDITS REQUIRED** 60
The Associate of Science (AS) degree is a two-year general transfer degree, typically with an emphasis in the natural, physical, or social sciences. It is similar to the Associate of Arts degree, but primarily intended for transfer into a Bachelor of Science degree, and requires focused coursework in one or two subject areas or academic disciplines.

Students completing the AS degree are encouraged to complete their General Education requirements in the first year of the program. In the second year, students complete interest area courses and electives.

**General Education** (page 42)  
**General Education Credits**  
31-32

**Area of Interest**

<table>
<thead>
<tr>
<th>Complete 20 credits in no more than two of the following areas:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology</td>
</tr>
<tr>
<td>Business</td>
</tr>
<tr>
<td>Chemistry</td>
</tr>
<tr>
<td>Computer Science</td>
</tr>
<tr>
<td>Economics</td>
</tr>
<tr>
<td>Education</td>
</tr>
<tr>
<td>English</td>
</tr>
<tr>
<td>Environmental Science</td>
</tr>
<tr>
<td>Equine Studies</td>
</tr>
</tbody>
</table>

| Interest Area Credits | 20 |

**Electives**

<table>
<thead>
<tr>
<th>Complete 8-9 credits from any catalog courses</th>
</tr>
</thead>
</table>

**Elective Credits**  
8-9

**TOTAL CREDITS REQUIRED**  
60
School of Education, Business & Technology

General Program Information

The School of Education, Business, & Technology is comprised of Bachelor of Science degrees in:
- BS: Business Administration
- BS: Natural Horsemanship
- BS: Early Childhood Education
- BS: Elementary Education
- BS: Secondary Education

Associate of Applied Science degrees are offered in:
- AAS: Business
- AAS: Early Childhood Education
- AAS: Education Studies
- AAS: Equine Studies
- AAS: Natural Horsemanship
- AAS: Tourism & Recreation
Program Mission Statement

Offering a unique combination of traditional business courses and options that incorporate technology, problem-based learning, and hands-on and team-based projects, Montana Western’s BS: Business Administration degree is designed to challenge students to acquire the practical, intellectual, technological, problem-solving, and communications skills necessary for successful participation in a diverse, dynamic, and global society. While the program is delivered using a small business, rural context, graduates are well prepared for joining a large corporation as well as pursuing a master’s degree in business administration.

Graduate Outcomes

Program graduates:
- understand and apply fundamental concepts and practices of business administration, primarily management, marketing, finance, and operations.
- understand and apply economic principles.
- understand the fundamental concepts and practices of marketing including global marketing management, e-commerce, e-business, and e-marketing.
- develop an ability to identify problems, collect and assess data, and present solutions using innovation and organizational skills.
- utilize computer software and hardware tools for problem-solving, decision-making, and communication.
- exhibit effective oral and written communications skills for successful interactions in business settings.
- demonstrate creative, ethical behavior in individual and team-based projects while learning to stay focused and use personal initiative to accomplish established goals.
- recognize and respect the diversity implicit in global society.

Assessment

The University of Montana Western has received specialized accreditation for its Bachelor of Science and Bachelor of Applied Science degree programs in Business through the International Assembly for Collegiate Business Education (IACBE), Olathe, Kansas.

Graduate outcomes are assessed using both direct and indirect measures: oral/written communications skills assessed at beginning, midpoint, and end of the BS: Business Administration program, nationally recognized and normed standardized exam administered to all senior students, internship evaluation from supervisors, exit interviews with graduating seniors, alumni surveys, and cumulative evaluation of faculty performance.

The assessment plan and annual results can be found on the web at http://www.umwestern.edu/shares/bus_share/accredit-files/BSBA-program-assessment-09.pdf.
**BS: Business Administration**

**General Education & Core**

Students must complete the General Education requirements, the Business Core, an Internship, and one Option Area.

**General Education (page 42)**

<table>
<thead>
<tr>
<th>Pre-Fall 2009 UMW Course</th>
<th>OCHE Equivalent Course</th>
<th>General Education Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 250 Prin/Economics</td>
<td>ECNS 203 Prin/Macro</td>
<td>4</td>
</tr>
</tbody>
</table>

**Business Administration Core**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>General Education Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 217</td>
<td>Bus/Elec Comm</td>
<td>TBD</td>
</tr>
<tr>
<td>BUS 241</td>
<td>Financial Acctng</td>
<td>TBD</td>
</tr>
<tr>
<td>BUS 242</td>
<td>Managerial Acctng</td>
<td>TBD</td>
</tr>
<tr>
<td>BUS 253</td>
<td>Bus Rsrch/Stat Analysis</td>
<td>TBD</td>
</tr>
<tr>
<td>BUS 280</td>
<td>Business Law</td>
<td>TBD</td>
</tr>
<tr>
<td>BUS 325</td>
<td>Prin/Prac/Mgt</td>
<td>TBD</td>
</tr>
<tr>
<td>BUS 326</td>
<td>Organizational Behavior</td>
<td>TBD</td>
</tr>
<tr>
<td>BUS 341</td>
<td>Business Finance</td>
<td>TBD</td>
</tr>
<tr>
<td>BUS 347</td>
<td>Prin/Prac/Mrkng</td>
<td>TBD</td>
</tr>
<tr>
<td>BUS 355</td>
<td>Operations Mgt</td>
<td>TBD</td>
</tr>
<tr>
<td>BUS 461</td>
<td>Sm Bus Mgt/Strat Planning</td>
<td>TBD</td>
</tr>
<tr>
<td>COMS 101</td>
<td>Intro/Comp/Pres</td>
<td>CAPP 100 Sht Cns/Comp Lit</td>
</tr>
<tr>
<td>COMS 135</td>
<td>Comp Applications</td>
<td>CAPP 131 Basic MS Office</td>
</tr>
<tr>
<td>BUS 410</td>
<td>Career Planning</td>
<td>TBD</td>
</tr>
<tr>
<td>BUS 400</td>
<td>Internship</td>
<td>XXX 400 Coop Ed/Intern orXXX 498 Intern/Coop Ed/Omni</td>
</tr>
</tbody>
</table>

**Core Credits**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>General Education Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 217</td>
<td>Bus/Elec Comm</td>
<td>4</td>
</tr>
<tr>
<td>BUS 241</td>
<td>Financial Acctng</td>
<td>3</td>
</tr>
<tr>
<td>BUS 242</td>
<td>Managerial Acctng</td>
<td>3</td>
</tr>
<tr>
<td>BUS 253</td>
<td>Bus Rsrch/Stat Analysis</td>
<td>4</td>
</tr>
<tr>
<td>BUS 280</td>
<td>Business Law</td>
<td>4</td>
</tr>
<tr>
<td>BUS 325</td>
<td>Prin/Prac/Mgt</td>
<td>3</td>
</tr>
<tr>
<td>BUS 326</td>
<td>Organizational Behavior</td>
<td>3</td>
</tr>
<tr>
<td>BUS 341</td>
<td>Business Finance</td>
<td>3</td>
</tr>
<tr>
<td>BUS 347</td>
<td>Prin/Prac/Mrkng</td>
<td>3</td>
</tr>
<tr>
<td>BUS 355</td>
<td>Operations Mgt</td>
<td>3</td>
</tr>
<tr>
<td>BUS 461</td>
<td>Sm Bus Mgt/Strat Planning</td>
<td>3</td>
</tr>
<tr>
<td>COMS 101</td>
<td>Intro/Comp/Pres</td>
<td>1</td>
</tr>
<tr>
<td>COMS 135</td>
<td>Comp Applications</td>
<td>4</td>
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<tr>
<td>BUS 410</td>
<td>Career Planning</td>
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<tr>
<td>BUS 400</td>
<td>Internship</td>
<td>6</td>
</tr>
</tbody>
</table>

**Option Area**

<table>
<thead>
<tr>
<th>Option Area</th>
<th>Option Area Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equine Management</td>
<td>30-35</td>
</tr>
<tr>
<td>Health &amp; Fitness Mgt</td>
<td>35</td>
</tr>
<tr>
<td>Industrial Technology Mgt</td>
<td>30</td>
</tr>
<tr>
<td>Small Business Management</td>
<td>33</td>
</tr>
<tr>
<td>Tourism</td>
<td>34</td>
</tr>
<tr>
<td>Web &amp; Digital Media</td>
<td>32</td>
</tr>
</tbody>
</table>

**Option Area Credits**

<table>
<thead>
<tr>
<th>Option Area</th>
<th>Option Area Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select One Option (see next page):</td>
<td>30-35</td>
</tr>
</tbody>
</table>

**Electives**

<table>
<thead>
<tr>
<th>Electives</th>
<th>Elective Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select from any catalog courses</td>
<td>4-10</td>
</tr>
</tbody>
</table>

**TOTAL CREDITS REQUIRED**

| Total Credits | 120 |

The University of Montana Western Catalog 2010-2011
### BS: Business Administration
#### Option Areas

#### Equine Management Option
<table>
<thead>
<tr>
<th>Pre-Fall 2009/10 UMW Course</th>
<th>OCHE Equivalent Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 201 Small Bus Development</td>
<td>TBD</td>
</tr>
<tr>
<td>BUS 461 Sm Bus Mgt/Strat Plan</td>
<td>TBD</td>
</tr>
<tr>
<td>QST 101 Intro/Equine Studies</td>
<td>TBD</td>
</tr>
<tr>
<td>QST 102 Equine Select/Judging</td>
<td>TBD</td>
</tr>
<tr>
<td>QST 201 Bsc Horse Care/Nutr</td>
<td>TBD</td>
</tr>
<tr>
<td>QST 202 Bsc Equine Science I</td>
<td>TBD</td>
</tr>
<tr>
<td>QST 203 Bsc Equine Science II</td>
<td>TBD</td>
</tr>
<tr>
<td>QST 204 Equine Facilities Mgt</td>
<td>BD</td>
</tr>
</tbody>
</table>

**Total Credits: 30**

#### Health & Fitness Management Option

<table>
<thead>
<tr>
<th>Course</th>
<th>OCHE Equivalent Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>HHP 143 Found/Health/PE</td>
<td>TBD</td>
</tr>
<tr>
<td>HHP 241 Pers/Comm Health</td>
<td>TBD</td>
</tr>
<tr>
<td>HHP 311 Athletic Training</td>
<td>TBD</td>
</tr>
<tr>
<td>HHP 315 Biomechanics</td>
<td>TBD</td>
</tr>
<tr>
<td>HHP 317 Exercise Physiol</td>
<td>TBD</td>
</tr>
<tr>
<td>HHP 347 Org/Admin/Hlth Enhanc</td>
<td>TBD</td>
</tr>
<tr>
<td>HHP 364 Nutrition</td>
<td>TBD</td>
</tr>
<tr>
<td>HHP 416 Cond Prog Devel</td>
<td>TBD</td>
</tr>
</tbody>
</table>

**Total Credits: 32**

#### Industrial Technology Option

<table>
<thead>
<tr>
<th>Course</th>
<th>OCHE Equivalent Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 201 Small Bus Development</td>
<td>TBD</td>
</tr>
<tr>
<td>BUS 461 Sm Bus Mgt/Strat Plan</td>
<td>TBD</td>
</tr>
<tr>
<td>T 120 Pwr/Energy/Trans Fund</td>
<td>TBD</td>
</tr>
<tr>
<td>T 130 Graphic Communication</td>
<td>TBD</td>
</tr>
<tr>
<td>T 135 Comp-Aided Drafting</td>
<td>TBD</td>
</tr>
<tr>
<td>T 140 Metal Materials/Processes</td>
<td>TBD</td>
</tr>
<tr>
<td>T 230 Prog Mgt/Stat Proc Cnrl</td>
<td>TBD</td>
</tr>
<tr>
<td>T 240 Wood/Synth Prod Syst</td>
<td>TBD</td>
</tr>
<tr>
<td>T 241 Machining</td>
<td>TBD</td>
</tr>
</tbody>
</table>

**Total Credits: 30**

#### Small Business Management Option

<table>
<thead>
<tr>
<th>Course</th>
<th>OCHE Equivalent Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 301 Entrepreneurship</td>
<td>TBD</td>
</tr>
<tr>
<td>BUS 304 Leadership</td>
<td>TBD</td>
</tr>
<tr>
<td>BUS 327 Risk Mgt/Ins</td>
<td>TBD</td>
</tr>
<tr>
<td>BUS 329 Hrm Rsrc Mgt</td>
<td>TBD</td>
</tr>
<tr>
<td>BUS 349 Consumer Behavior</td>
<td>TBD</td>
</tr>
<tr>
<td>ECON 434 Rare Economics</td>
<td>ECNS 332 Econ/Nat Rces</td>
</tr>
</tbody>
</table>

Select 1 from the following: 4

<table>
<thead>
<tr>
<th>Course</th>
<th>OCHE Equivalent Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMS 205 Bus Info Systems</td>
<td>TBD</td>
</tr>
<tr>
<td>COMS 210 Comp Hrdwr/Sftwr Mgt</td>
<td>TBD</td>
</tr>
<tr>
<td>COMS 212 Intro/Web Design</td>
<td>TBD</td>
</tr>
<tr>
<td>COMS 235 Video/Audio Design</td>
<td>TBD</td>
</tr>
<tr>
<td>COMS 242 Dig Print Media</td>
<td>TBD</td>
</tr>
<tr>
<td>COMS 325 Dig Graphcs/Animat Design</td>
<td>TBD</td>
</tr>
<tr>
<td>COMS 335 Adv Web Design</td>
<td>TBD</td>
</tr>
<tr>
<td>COMS 410 Capstone Project</td>
<td>TBD</td>
</tr>
</tbody>
</table>

**Total Credits: 33**

#### Tourism Option

<table>
<thead>
<tr>
<th>Pre-Fall 2009/10 UMW Course</th>
<th>OCHE Equivalent Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 202 Customer Serv</td>
<td>TBD</td>
</tr>
<tr>
<td>BUS 304 Leadership</td>
<td>TBD</td>
</tr>
<tr>
<td>ECON 334 Econ/Tour/Rec</td>
<td>ECNS 334 Econ/Tour/Rec</td>
</tr>
<tr>
<td>HTR 112 Fund/Tourism</td>
<td>TBD</td>
</tr>
<tr>
<td>HTR 210 Destination Geog</td>
<td>TBD</td>
</tr>
</tbody>
</table>

Select 9 credits from the following: 9

<table>
<thead>
<tr>
<th>Course</th>
<th>OCHE Equivalent Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>HTR 322 Group Travel</td>
<td>TBD</td>
</tr>
<tr>
<td>HTR 345 Special Events</td>
<td>TBD</td>
</tr>
<tr>
<td>HTR 350 Resort Mgt</td>
<td>TBD</td>
</tr>
<tr>
<td>HTR 355 Mgt Planning</td>
<td>TBD</td>
</tr>
</tbody>
</table>

**Total Credits: 34**

#### Web & Digital Media Option

<table>
<thead>
<tr>
<th>Course</th>
<th>OCHE Equivalent Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 140 Color &amp; Design</td>
<td>TBD</td>
</tr>
<tr>
<td>COMS 205 Bus Info Systems</td>
<td>TBD</td>
</tr>
<tr>
<td>COMS 210 Comp Hrdwr/Sftwr Mgt</td>
<td>TBD</td>
</tr>
<tr>
<td>COMS 212 Intro/Web Design</td>
<td>TBD</td>
</tr>
<tr>
<td>COMS 235 Video/Audio Design</td>
<td>TBD</td>
</tr>
<tr>
<td>COMS 242 Dig Print Media</td>
<td>TBD</td>
</tr>
<tr>
<td>COMS 325 Dig Graphcs/Animat Design</td>
<td>TBD</td>
</tr>
<tr>
<td>COMS 335 Adv Web Design</td>
<td>TBD</td>
</tr>
<tr>
<td>COMS 410 Capstone Project</td>
<td>TBD</td>
</tr>
</tbody>
</table>

**Total Credits: 32**

#### Other Options

- Related Areas in any Catalog discipline may be used as the student’s Option.
- The Related Area will consist of not less than 34 credits including all of the following:
  - Completion of all courses in chosen Related Area: 34 min
  - Completion of the following: 6
    - BUS 201 Sm Bus Develop (3)
    - BUS 461 Sm Bus Mgt/Strat Plan (3)

**Total Credits: 33**

#### Secondary Business Education Teaching Option:

Business Administration students who would like to obtain a teaching license in business education must complete a B.S. in Business Administration.

For a listing of education requirements, see following page.
Business & Computer Applications:
Advising Protocol for Educator Licensure
(for students who already have a Bachelor’s Degree in Business and are seeking a teaching license)

Refer to pages 85-89 for information on applying for admission to the Teacher Education Program and for information regarding program requirements. The Education Department strongly recommends that candidates seek licensure in more than one subject area (by combining one teaching major with at least one teaching minor or additional major) to increase their hiring options. A Coaching Option is also available with any teaching major, but does not lead to licensure.

Required:
1. Bachelor’s degree in Business.
2. Must meet the following minimum requirements for entrance into the Teacher Education Program (TEP):
   a. 2.50 overall GPA in undergraduate Business degree program, with no grade lower than C- in courses required for the major.
   b. Completion of the TEP application form.
3. Must complete all requirements of TEP, including presenting a Phase I, Phase II, and Phase III portfolio.
4. Must pass a criminal background check prior to being admitted to the field experiences for the professional education classes and prior to student teaching.
5. Contact the Director of Field Experiences for licensure information.

Following is the class layout for those students who already have obtained a BS: Business Administration and would like to obtain teaching certification. Students must complete the required education courses below:

<table>
<thead>
<tr>
<th>Pre-Fall 2009/10 UMW Course</th>
<th>OCHE Equivalent Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 351 Methods/Materials/Business Theory Subjects</td>
<td>TBD</td>
</tr>
<tr>
<td>COMS 351 Methods/Materials in Computer Applications</td>
<td>TBD</td>
</tr>
<tr>
<td>ED 120 Becoming a Professional Educator</td>
<td>EDU 201 Intro/Ed w/Fld Exper</td>
</tr>
<tr>
<td>ED 253 Psychol Foundations of Teach/Learn</td>
<td>EDU 222 Ed Psy/Child Devel</td>
</tr>
<tr>
<td>ED 328 Curric/Instruction/Assess/Mgt (3)</td>
<td>EDU 382 Assess/Curric/Instruction</td>
</tr>
<tr>
<td>ED 329 Curric/Instruction/Assess/Mgt Prac (1)</td>
<td>EDU 340 Classroom Mgt</td>
</tr>
<tr>
<td>ED 425 Multicultural/Global Ed (3)</td>
<td>EDU 311 Cult/Divers/Ethics in Global Ed (4)</td>
</tr>
<tr>
<td>ED 426 Multicultural/Global Ed Prac (1)</td>
<td></td>
</tr>
<tr>
<td>ED 445 Meth/Tchg Cont Area Litrcy</td>
<td>EDU 481 Contit Area Litrcy</td>
</tr>
<tr>
<td>ED 473 Student Teaching-Secondary</td>
<td>EDU 495 Student Teaching: 5-12</td>
</tr>
<tr>
<td>HHP 241 Pers/Community Health (4)</td>
<td>TBD</td>
</tr>
<tr>
<td>HHP 245 Human Sexuality (4)</td>
<td>TBD</td>
</tr>
</tbody>
</table>

Select 1 from the following:
HHP 241 Pers/Community Health (4)
HHP 245 Human Sexuality (4)

Students may also be required to take additional computer application courses depending upon the courses they have previously taken:

| COMS 212 Introduction to Web Design (4)             | TBD                                    |
| COMS 205 Business Information Systems (4)          | TBD                                    |
| COMS 210 Computer Hardware/Software Mgt (4)        | TS 205 Computer Hardware/Software Mgt (4) |
| COMS 135 Microcomputer Applications (4)            | CAPP 131 Basic MS Office (4)           |
| COMS 236 Adv Microcomputer Applications (4)        | CAPP 251 Adv Microsoft Office (4)      |
| COMS 339 Database Mgt (3)                          | TBD                                    |

For Those Who Already Hold a Teaching License
For individuals who already hold a teaching license in another secondary education content area, adding a new content area endorsement in Business & Computer Applications requires completion of appropriate content coursework, including COMS 351 and BUS 351. Some professional education courses may be waived. These individuals are not required to complete student teaching (ED 473/EDU 495) or an internship, unless seeking an additional degree. Individuals with an elementary education license must complete a teaching internship in an appropriate secondary classroom (4 credits of supervised internship for at least two semesters).
Bachelor of Science:  
Natural Horsemanship

Program Mission Statement

The mission of the BS: Natural Horsemanship program is to provide students with an education in equine theory and science combined with the practical skills of natural horsemanship. Horsemanship skills taught in the practical classes are heavily based on the principles of equine behavior along with horse training methods of experts renowned in natural horsemanship and similar disciplines. Academic aspects of the program are designed to increase students’ knowledge of the science, care, and management of horses, and to expand their awareness of the equine industry well above that of the average horseperson. The University of Montana Western’s experiential approach and broad-based curriculum allows the successful graduate to pursue a wide range of equine-related professions.

In addition to general admission to UMW, students interested in the Natural Horsemanship Program must apply by March 1st for the introductory Natural Horsemanship classes that will start that fall (August). The Natural Horsemanship Admissions Committee evaluates prospective students based on a combination of academic ability, horsemanship experience, natural horsemanship experience (if any), and student desire for participation in the program. Application forms for the program are available from the Admissions Office or through the UMW Natural Horsemanship website: http://hal.umwestern.edu/shares/bus_share/eq.html.

Natural horsemanship students must provide their own horse, housing for that horse, and horse transportation to and from the class facility. UMW natural horsemanship instructors will determine the ultimate suitability of the horse; stallions or untrained horses are not acceptable.

Montana Western’s Natural Horsemanship program is demanding for both the students and their horses. Completion of the program in the allotted time frame demands that the student take a class overload. The UMW Academic Admissions & Standards Committee generally requires that a student taking a class overload maintain a “B” average. Therefore, a goal of academic excellence is a “must” for the interested participant.

To ensure that the Bachelor’s degree program graduates only the most outstanding students, a secondary assessment of prospective Bachelor’s degree students will be made after the second year or between the Associate of Applied Science and Bachelor’s degrees. Students will have to demonstrate a given level of proficiency in horsemanship, theory about natural horsemanship, and knowledge of basic equine science and horse care to advance to the 300-400 level natural horsemanship courses.

For AAS: Natural Horsemanship, see page 124.

Graduate Outcomes

Program graduates will:

- be proficient in methods of horsemanship based on the theories of natural horsemanship and similar disciplines.
- understand the principles of equine behavior and how they relate to horsemanship.
- be knowledgeable and efficient in approaching young horse starting and initial development.
- be well-versed in general knowledge about the equine industry including the common breeds, equine activities and events, and equine-related career options.
- understand the principles of equine nutrition and basic horse care to maximize horse health and performance.
- understand the basic anatomy and physiology of the horse, and be conversant with the common disease and lameness problems seen in horses.
- understand and implement basic preventative herd health programs for horses.
- communicate effectively, both orally and in writing, on equine-related subjects with a wide variety of equine professionals and others in the industry.
- work collegially with others.
- be able to assess and work with a horse in most situations encountered during normal handling and riding activities.
- have sufficient knowledge to assess, identify, and overcome behavioral obstacles that hinder a horse’s development.
- possess the knowledge and skills required to assess a horse’s basic health status.
- be able to assess a horse’s conformation and gait and relate it to that horse’s suitability, function, and health.
- be able to recognize and evaluate a variety of horse feeds and pasture situations.
- be conversant about and be able to recognize common disease problems in horses.
- understand and evaluate the effectiveness of equine preventative health programs.

Assessment

The graduate outcomes for the BS: Natural Horsemanship are assessed through the graduate/exit survey, employer survey, alumni survey, feedback from internship supervisors, review of collected student-generated exhibits over time, and program self-study and/or reports from external reviews. The assessment plan for the BS: Natural Horsemanship is available on the web at http://www.umwestern.edu/administration/vcaa/accreditation/accnatural/.
### BS: Natural Horsemanship

#### General Education

<table>
<thead>
<tr>
<th>Pre-Fall 2009/10 UM Course</th>
<th>OCHE Equivalent Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 102 Found/Language</td>
<td>WRIT 101 Coll Writing I</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 101 Intro/Chemistry</td>
<td>CHMT 121 Intro/Gen Chem</td>
<td>4</td>
</tr>
<tr>
<td>or CHEM 131 Gen Chem - for Science Option</td>
<td>or CHMT 141 Coll Chem I - for Science Option</td>
<td></td>
</tr>
<tr>
<td>HIST 101 European Civ I or other History course</td>
<td>HISTR 101 Western Civ I or other HISTA/HISTR course</td>
<td>4</td>
</tr>
<tr>
<td>Humanities: Expressive Arts</td>
<td>TBD</td>
<td>4</td>
</tr>
<tr>
<td>Humanities: Literary &amp; Artistic Studies</td>
<td>TBD</td>
<td>4</td>
</tr>
<tr>
<td>100-level MATH course or higher or MATH 131 Probability - for Science &amp; Psychology Options</td>
<td>100-level M course or higher or STAT 121 Probability - for Science &amp; Psychology Options</td>
<td>4</td>
</tr>
<tr>
<td>PSY 100 General Psych</td>
<td>PSYX 100 Intro/Psych</td>
<td>4</td>
</tr>
<tr>
<td>Select 1 from the following:</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>BIO 101 Intro/Science (4)</td>
<td>BIOB 101 Discover Biol (4)</td>
<td></td>
</tr>
<tr>
<td>BIO 111 Biology I (4)</td>
<td>BIOB 160 Prin/Living Syst (4)</td>
<td></td>
</tr>
</tbody>
</table>

#### BS: Natural Horsemanship Core

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EQST 101 Intro/Equine Studies</td>
<td>TBD</td>
</tr>
<tr>
<td>EQST 155 Intro/NH: Gain Confid/Respect</td>
<td>TBD</td>
</tr>
<tr>
<td>EQST 201 Basic Horse Care/Nutrition</td>
<td>TBD</td>
</tr>
<tr>
<td>EQST 202 Basic Equine Science I</td>
<td>TBD</td>
</tr>
<tr>
<td>EQST 203 Basic Equine Science II</td>
<td>TBD</td>
</tr>
<tr>
<td>EQST 204 Equine Facilities Mgt</td>
<td>TBD</td>
</tr>
<tr>
<td>EQST 252 NH: Building a Relationship</td>
<td>TBD</td>
</tr>
<tr>
<td>EQST 254 NH: Harmony with/Horse I</td>
<td>TBD</td>
</tr>
<tr>
<td>EQST 255 NH: Harmony w/Horse II</td>
<td>TBD</td>
</tr>
<tr>
<td>EQST 351 NH: Refining the Foundation I</td>
<td>TBD</td>
</tr>
<tr>
<td>EQST 352 NH: Refining the Foundation II</td>
<td>TBD</td>
</tr>
<tr>
<td>Select 1 from the following:</td>
<td>TBD</td>
</tr>
<tr>
<td>EQST 453 Young Horse Start/Devel (4)</td>
<td>TBD</td>
</tr>
<tr>
<td>EQST 454 Equine Behavior (4)</td>
<td>TBD</td>
</tr>
</tbody>
</table>

#### BS: Natural Horsemanship Option

<table>
<thead>
<tr>
<th>Option Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select one Option:</td>
</tr>
<tr>
<td>Natural Horsemanship: Management (32)</td>
</tr>
<tr>
<td>Natural Horsemanship: Psychology (32)</td>
</tr>
<tr>
<td>Natural Horsemanship: Science (32)</td>
</tr>
</tbody>
</table>

#### Internship/Thesis

<table>
<thead>
<tr>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EQST 400 NH Internship (V 4-12)</td>
</tr>
<tr>
<td>EQST 498 Senior Thesis (2)</td>
</tr>
</tbody>
</table>

#### Electives

<table>
<thead>
<tr>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select from any catalog courses</td>
</tr>
</tbody>
</table>

Total Credits Required: 120
# BS: Natural Horsemanship Option Areas

## Natural Horsemanship: Management Option

<table>
<thead>
<tr>
<th>Pre-Fall 2009/10 UMW Course</th>
<th>OCHE Equivalent Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 241 Financial Accounting</td>
<td>ACTG 201 Prin/Fin Acctng</td>
<td>3</td>
</tr>
<tr>
<td>BUS 280 Business Law</td>
<td>TBD</td>
<td>4</td>
</tr>
<tr>
<td>BUS 201 Small Bus Development</td>
<td>TBD</td>
<td>3</td>
</tr>
<tr>
<td>EQST 404 Cntrmp Iss/Ethics/Eqine Ind</td>
<td>TBD</td>
<td>4</td>
</tr>
<tr>
<td>ECN 250 Prin/Economics</td>
<td>ECNS 203 Prin/Micro/Macro</td>
<td>4</td>
</tr>
</tbody>
</table>

**Professional Electives**

<table>
<thead>
<tr>
<th>Select 15 credits from the following:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Any EQST course not taken in Natural Horsemanship Core</td>
<td></td>
</tr>
<tr>
<td>Any ACTG/BUS/ECNS/ECON/HTR course not listed above</td>
<td></td>
</tr>
</tbody>
</table>

**Total Credits**

- 32

## Natural Horsemanship: Psychology Option

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 203 Comparative Psych</td>
<td>4</td>
</tr>
<tr>
<td>PSY 220 Intro/Soc Sci Rsrch Meth</td>
<td>4</td>
</tr>
<tr>
<td>PSY 265 Intro/Motiv-Theor/Prct</td>
<td>4</td>
</tr>
<tr>
<td>PSY 300 Quant Rsrch Meth/Behav Sci</td>
<td>4</td>
</tr>
<tr>
<td>PSY 437 Psych/Personality</td>
<td>4</td>
</tr>
<tr>
<td>PSY 438 Abnormal Psych</td>
<td>4</td>
</tr>
</tbody>
</table>

**Psychology Electives**

| Select 8 credits | |

| Recommended electives: |
|-----------------------|---|
| PSY 452 Soc Psych/Group Dyn (4) | |
| EQST 453 Young Horse Start/Dev (4) | |
| EQST 454 Equine Behavior (4) | |

**Total Credits**

- 32

## Natural Horsemanship: Science Option

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 112 Biology II</td>
<td>4</td>
</tr>
<tr>
<td>BIO 255 Cell Biology</td>
<td>4</td>
</tr>
<tr>
<td>BIO 343 Genetics</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 132 Gen Chem</td>
<td>4</td>
</tr>
</tbody>
</table>

**Professional Electives**

<table>
<thead>
<tr>
<th>Select 16 credits from the following:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Any BIO/CHEM/CHMY/EQST/M/MATH/PYH course not taken above</td>
<td></td>
</tr>
</tbody>
</table>

**Total Credits**

- 32
Bachelor of Science:
Early Childhood Education

Program Mission Statement

Practitioners completing the BS: Early Childhood Education will be prepared to assume leadership roles as early childhood teachers, parent educators, early childhood program administrators, and early childhood trainers in a variety of settings. General Education courses, early childhood core courses, and early childhood specialty courses combine to provide the student with a background in liberal studies together with extensive early childhood coursework and experiences. The related area allows students to develop an area of specialization within early childhood.

This degree is designed to be accessible to both traditional students and place-bound practitioners who are currently working in the early childhood field. Many General Education courses are offered online by UMW as well as other campuses within the Montana University System. Early childhood core courses are included in Montana Western’s AAS: Early Childhood Education degree program and are currently offered in Billings, Bozeman, Butte, Dillon, Great Falls, Hamilton, Havre, Helena, and Missoula. Early childhood specialty courses are offered through online and intensive (weekend, week-long) coursework.

Graduate Outcomes

Program graduates will:

- know and understand young children’s characteristics and needs.
- know and understand the multiple influences on development and learning.
- use developmental knowledge to create healthy, respectful, supportive, and challenging learning environments.
- know about and understand family and community characteristics.
- support and empower families and communities through respectful, reciprocal relationships.
- involve families and communities in their children’s development and learning.
- understand the goals, benefits, and uses of assessment.
- know about and use observation, documentation, and other appropriate assessment tools and approaches.
- understand and practice responsible assessment.
- know about assessment partnerships with families and other professionals.
- know, understand, and use positive relationships and supportive interactions.
- know and understand the importance, central concepts, inquiry tools, and structures of content areas or academic disciplines.
- use their own knowledge and other resources to design, implement, and evaluate meaningful, challenging curriculum to promote positive outcomes.
- identify and involve themselves with the early childhood field.
- know about and uphold ethical standards and other professional guidelines.
- engage in continuous, collaborative learning to inform practice.
- integrate knowledgeable, reflective, and critical perspectives on early education.
- design and implement meaningful, research-based, content rich experiences and environments in early childhood settings in language and literacy, mathematics, physical development and health, social competence, science, and the creative arts.
- utilize effective, developmental teaching methods that emphasize long-term, in-depth experiences based upon children's needs and interests.
- implement family, staff, program and individual and group child assessment strategies.
- use knowledge of adult learning theory and teacher development to supervise and mentor adults and to develop effective adult workshops.
- develop a related area in a specific area of emphasis based upon future career interests and goals.
- apply environmental, curricular, and management strategies that will promote school success for students with special needs.
- examine and apply research and theories on children, families and communities including socioeconomic conditions, family structures, relationships, stressors, supports, home language, cultural values, and ethnicity.

Assessment

The graduate outcomes for the BS: Early Childhood Education are assessed through employer surveys, alumni surveys, review of portfolio artifacts, observations of students in practicum sites, program self-study, and reports from external reviews. The assessment plan for the BS: Early Childhood Education is available on the web at http://www.umwestern.edu/administration/vcaa/accreditation/accbsece/.
BS: Early Childhood Education

Students must maintain a 3.00 average in the Early Childhood Core and Specialty courses with no grade lower than a “C-”

General Education (page 42)

| English courses not taken through UMW must demonstrate an oral and written communication component. |

General Education Credits 31-32

Early Childhood Core

<table>
<thead>
<tr>
<th>Pre-Fall 2009/10 UM Course</th>
<th>OCHE Equivalent Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED 142 Intro/Early Childhd</td>
<td>TBD</td>
</tr>
<tr>
<td>ED 143 Intro/Early Childhd Lab</td>
<td>TBD</td>
</tr>
<tr>
<td>ED 144 Creat/Envt/Learning</td>
<td>TBD</td>
</tr>
<tr>
<td>ED 145 Creat/Envt/Learning Lab</td>
<td>TBD</td>
</tr>
<tr>
<td>ED 240 Pos Child Discipline</td>
<td>TBD</td>
</tr>
<tr>
<td>ED 241 Pos Child Discipline Lab</td>
<td>TBD</td>
</tr>
<tr>
<td>ED 242 Meet Needs/Families</td>
<td>TBD</td>
</tr>
<tr>
<td>ED 243 Meet Needs/Families Lab</td>
<td>TBD</td>
</tr>
<tr>
<td>ED 250 Child Growth/Devel</td>
<td>TBD</td>
</tr>
<tr>
<td>ED 251 Child Growth/Devel Lab</td>
<td>TBD</td>
</tr>
<tr>
<td>ED 320 Early Childhd Curr I</td>
<td>TBD</td>
</tr>
<tr>
<td>ED 321 Early Childhd Curr II Lab</td>
<td>TBD</td>
</tr>
<tr>
<td>ED 325 Early Childhd Curr II Lab</td>
<td>TBD</td>
</tr>
<tr>
<td>ED 344 Early Childhd Prof</td>
<td>TBD</td>
</tr>
<tr>
<td>ED 345 Early Childhd Prof Lab</td>
<td>TBD</td>
</tr>
</tbody>
</table>

Early Childhood Core Credits 24

Early Childhood Specialty Courses

| ED 326 InfantToddler Dev/Grp Care | TBD                   |
| ED 341 Exceptional Learner      | TBD                   |
| ED 346 Early Literacy           | TBD                   |
| ED 348 Math/Sci/Early Childhd   | TBD                   |
| ED 352 Enhance Phys Skills/ Erly Child | TBD |
| ED 354 Foster Soc Comp/Early Yrs | TBD                  |
| ED 421 Creatvty/Young Child: Explor Reggio Emelia/Proj Approach | TBD |
| ED 422 Family/Comm/Culture     | EDU 442 Fam/Comm/Culture |
| ED 424 Erly Child Assess/Outcms | TBD                  |
| ED 455 Child Dev Theories/Rsrch | TBD                   |
| ED 457 Coach/Mentor Adults     | EDU 447 Coach/Motr Adults |
| ED 496 Early Childhood Prac    | TBD                   |
| Creative Arts Workshops        | TBD                   |
| Safety, Health, or Nutrition course | TBD            |

Specialty Course Credits 44

Related Area

In consultation with advisor, complete courses in a selected specific area of emphasis within early childhood education (e.g., administration, infant-toddler, home visitor, school age care, exceptionality, health, safety & nutrition, technology, culture & diversity, mental health, business, or a specific curriculum area such as math, science, social studies, language, etc.)

Related Area Credits 12

Electives

Select 8-9 credits with input from a mentor

Elective Credits 8-9

TOTAL CREDITS REQUIRED 120
Bachelor of Science:  
Elementary Education  
Secondary Education  

Introduction  

Vision and Mission  
The University of Montana Western Department of Education maintains its position as a premier teacher education program. For over one hundred years, the education department has been preparing teachers who are successful in all settings. Montana Western’s teacher education program is a nationally-recognized rural education center. As a premier program, the department is noted for producing outstanding teachers in the oldest teacher education program in the state of Montana.  
The mission of the Montana Western Department of Education is to prepare effective teachers who are educational leaders for the twenty-first century.  

Accreditation  
The programs in Elementary and Secondary Education are accredited by the National Council for Accreditation of Teacher Education (NCATE), the Northwest Commission on Colleges and Universities (NWCCU), and the Montana Board of Public Education.  

The Teacher Education Program (TEP)  
Our caring and distinguished faculty provides student-centered learning in a small-class environment. Our students learn to meet the needs of ALL children through university instruction and their work with pre-K-12 teachers in a variety of classrooms across the nation. The faculty is committed to the following:  

- Experiential learning  
- Leadership development  
- Social justice  
- Reflective practice  
- Teaching through inquiry  
- Accountability to student learning  

All Elementary and Secondary Education majors must apply for and be accepted into the UMW Teacher Education Program (TEP) as part of their academic preparation. The TEP considers teacher preparation a learning process that includes field observations, close interactions with faculty, proficiency in writing, communication, and professional skills, development of a comprehensive teaching portfolio, and development of strong knowledge, skills, and dispositions that meet state and national standards for exemplary teaching. To maintain consistent growth as pre-professionals, it is important that students consult with their faculty advisor prior to applying for TEP and throughout their program of study.  

Students participate in a variety of field experiences, including observations in American Indian reservation schools and fieldwork in typical single-grade classrooms and rural schools. UMW candidates are uniquely prepared to teach in multi-age classrooms located in rural school settings.  

Assessment  
The graduate outcomes for the Elementary Education, Secondary Education, and K-12 programs are assessed through three phases of the Teacher Education Program (TEP). Detailed information regarding program requirements, policies, and procedures is found in the Teacher Education Program Student Handbook. Due to changing accreditation and licensure requirements, program requirements must change periodically. Students may expect some program and portfolio requirements to change during their time at UMW.  
The most current program and TEP portfolio requirements may be viewed online at http://www.umwestern.edu/shares/education/tep.html.  

Students may also purchase the Teacher Education Program Student Handbook in the Bookstore.  

Minimum Grade Requirements for Teacher Education Program (TEP)  
1. Candidates must maintain an overall 2.50 Grade Point Average (GPA).  
2. At admission to the Teacher Education Program (Phase I interview), candidate must have a 2.50 GPA or above for the General Education courses, with no grade lower than C-.  
3. Candidate must maintain a 2.50 GPA or above in Major and Minor courses (for Elementary Education, “Major courses” refers to all required content courses), with no grade in required content courses below C-, including courses counted for General Education.  
4. For Professional Education requirements (core) courses, candidates must maintain a GPA of 3.0 or above, with no grade below B-.  

The University of Montana Western Catalog 2010-2011
TEP Phase I—Admission into the Teacher Education Program (TEP)

TEP Phase I is typically completed during the sophomore year, after the student has taken a number of General Education courses and several Professional Education courses. Students should work closely with their faculty advisor to plan when to apply for admission to TEP. Transfer students must meet with a faculty advisor upon admission to UMW to discuss their application for entrance into TEP. The student applies for admission to the Teacher Education Program, and then presents the Phase I portfolio during an interview with faculty.

Students cannot proceed to the next phase of their program until they have successfully completed the course and program requirements for each Phase, including approval of the portfolio by faculty. The TEP portfolio is based on the ten national standards for teaching, the INTASCC Principles. For a list of courses to complete prior to admission to TEP, refer to the most current program and TEP portfolio requirements online at http://www.umwestern.edu/shares/education/tep.html.

Students must demonstrate adequate writing skills for admission to and continuation in the Teacher Education Program. A score of “developing” or “proficient” on the Extemporaneous Writing Sample is required for admission to TEP. Students are required to meet writing proficiency guidelines for admission to Montana universities. Writing scores provided to the UMW Admissions Office will satisfy the TEP Phase I writing sample requirement according to the following conversion chart:

<table>
<thead>
<tr>
<th></th>
<th>TEP Handbook 2007-08 and Beyond</th>
<th>Prior Year TEP Handbook Holistic Score</th>
<th>MUS Writing Assessment Holistic Score</th>
<th>ACT Writing Test Holistic Subscore</th>
<th>SAT Essay Holistic Subscore</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proficient</td>
<td>4 – 5</td>
<td>4.5 – 6</td>
<td>9 – 12</td>
<td>9 – 12</td>
<td></td>
</tr>
<tr>
<td>Developing</td>
<td>3</td>
<td>3.5 – 4</td>
<td>7 – 8</td>
<td>7 – 8</td>
<td></td>
</tr>
<tr>
<td>Unacceptable</td>
<td>1 – 2</td>
<td>1 – 3</td>
<td>2 – 6</td>
<td>2 – 6</td>
<td></td>
</tr>
</tbody>
</table>

In addition to course requirements listed in the TEP Student Handbook, students must also pass a current state and federal criminal background check prior to being admitted to TEP.

TEP Phase II

TEP Phase II includes completion of courses for the Major and/or Minor and completion of a number of Professional Education courses and field experiences. Various Professional Education courses require several-day visits to schools, typically requiring travel.

For programs for which the state requires PRAXIS II, students must take the appropriate PRAXIS II exams prior to student teaching. They must also submit a certificate of first aid & safety, and update their criminal background check, if it was completed more than two years previously.

The Phase II portfolio and interview are completed during the semester prior to student teaching, before the student is admitted to student teaching. The most current program and TEP portfolio requirements may be viewed online at http://www.umwestern.edu/shares/education/tep.html.

TEP Phase III—Student Teaching

At the end of student teaching, the student’s Phase III portfolio is reviewed again by faculty.

Program and Graduate Outcomes

Program outcomes are evaluated through a graduate/exit survey, employer survey, alumni survey, feedback from field experience supervisors and UMW coordinators, review of collected student-generated exhibits over time, including the student’s professional portfolio, scores on PRAXIS II exams, and program reports prepared for NCATE and OPI.

Assessment plans for the BS: Elementary Education and Secondary Education programs are available on the web at:
Elementary Education – http://www.umwestern.edu/administration/vCAA/accreditation/accelementary/.
Secondary Education – http://www.umwestern.edu/administration/vCAA/accreditation/accesecondary/.

Graduate Outcomes for Effective Teachers

Upon graduation from UMW, the beginning teacher will demonstrate evidence toward completion of the following outcomes related to teaching knowledge, skills, and dispositions. Knowledge is “knowing the content,” “skills” represents the ability to perform using knowledge, and “dispositions” refer to the human qualities inherent to ethical and reflective teaching. These graduate outcomes are evaluated throughout the candidate’s coursework and within the Phase I, II, and III portfolios.

Knowledge

The program graduate:
- understands major concepts, assumptions, debates, processes of inquiry, and ways of knowing that are central to the discipline(s) she/he teaches.
- is aware of expected developmental progressions and ranges of individual variation within each domain (physical, social, emotional, oral, and cognitive).
- understands the principles of effective classroom management.
- understands how students’ learning is influenced by individual experiences, talents, and prior learning, as well as language, culture, family, and community values.
- knows about areas of exceptionality in learning, including learning disabilities, visual and perceptual difficulties, and special physical or mental challenges.
- has developed an understanding and knowledge of diversity and exceptionality in learners, families, cultures, and communities.
- understands learning theory, subject matter, curriculum development, and student development.
- knows how to select, construct, and use assessment strategies and instruments appropriate to the learning outcomes being evaluated and to other diagnostic purposes.
- understands the major areas of research on teaching and of resources available for professional learning.
- understands and implements laws related to students’ rights and teacher responsibilities.
Skills
The program graduate:
• can create interdisciplinary learning experiences that allow students to integrate knowledge, skills, and methods of inquiry from several subject areas.
• engages students in generating knowledge and testing hypotheses according to the methods of inquiry and standards of evidence used in the discipline.
• stimulates student reflection on prior knowledge and links new ideas to already familiar ideas, taking advantage of socially constructed modes of learning.
• makes connections to students’ experiences, providing opportunities for active engagement, manipulation, and testing of ideas and materials.
• encourages students to assume responsibility for learning.
• identifies and designs instruction using multiple strategies appropriate to students’ stage of development, learning styles, multi-intelligences, strengths, and particular learning differences and needs.
• meets individual student needs including identifying and accessing appropriate services and resources to meet exceptional learning needs.
• uses information about students’ families, cultures, and communities as a basis for connecting instruction to students’ experiences.
• brings multiple perspectives and worldviews to classroom instruction and discussions.
• creates a learning community in which individual differences are respected and valued.
• uses multiple teaching and learning strategies to engage students in experiential, individual, and socially constructed learning opportunities.
• provides leadership in the development of students’ critical thinking, problem solving, and performance capabilities.
• helps K-12 students assume responsibility for identifying and using learning resources.
• uses a range of strategies including cooperative learning to promote positive relationships, cooperation, and purposeful learning in the classroom.
• models effective nonverbal and verbal communication, including the use of a variety of media communication tools such as audio-visual aids and computers.
• provides leadership by asking questions that effectively stimulate discussion in a variety of ways; e.g., probing for learner understanding, helping students articulate their ideas and thinking processes, promoting risk-taking and problem-solving, facilitating factual recall, encouraging convergent and divergent thinking, and stimulating curiosity.
• engages students in individual and cooperative learning activities that help them develop the motivation to achieve.
• knows how to use knowledge of learning theory, subject matter, curriculum development, and student development in planning instruction to meet curriculum goals.
• takes into account contextual considerations (instructional materials, individual student interests, needs, aptitudes, and community resources) in planning instruction.
• appropriately uses a variety of formal and informal assessment techniques (e.g., observation, portfolios of student work, teacher-made tests, performance assessments, student self-assessments, peer assessment, and standardized tests) to enhance her/his knowledge of learners, evaluate students’ progress and performances, and modify teaching and learning strategies.
• evaluates the effect of class activities and teaching strategies on individuals, groups, and the class as a whole.
• maintains useful records of student work and performance and can communicate student progress knowledgeably and responsibly, based on appropriate indicators, to students, parents, and other colleagues.
• uses information about students and educational research as a basis for reflecting on and improving practice.
• demonstrates leadership by making links with the learners’ other environments on behalf of students, by consulting with parents, counselors, teachers of other classes and activities within the schools, and professionals in other community agencies.
• takes the lead in establishing respectful cooperative relationships with parents, guardians, and families from diverse home and community situations.

Dispositional
The program graduate:
• is disposed to use students’ strengths as a basis for growth, and their errors as an opportunity for learning.
• respects every student as an individual with differing personal, family, cultural backgrounds, worldviews, and as having various talents and interests.
• values the role of students in promoting each other’s learning and recognizes the importance of peer relationships in establishing a climate of learning.
• values ongoing, documented assessment as essential to the instructional process and recognizes that many different assessment strategies are necessary for monitoring and promoting student learning.
• values both long-term and short-term planning.
• believes that plans must always be open to adjustment and revision based on student needs and changing circumstances.
• takes a leadership role in consulting with other adults regarding the education and well-being of her/his students.
• demonstrates leadership qualities through commitment to reflection, assessment, and critical thinking as an ongoing process.
• demonstrates leadership qualities through her/his commitment to engaging in and supporting appropriate professional practices.
• is concerned about all aspects of a child’s well-being (cognitive, emotional, social, and physical), and is alert to signs of difficulties.

Field Experiences
Education candidates are expected to complete a series of field experiences to assist in their preparation for a career in education. Time commitments for field experiences vary, depending upon one’s field of study and the requirements of the coursework associated with the field experience. Candidates may expect to complete their field experience in a location at least 65 miles from Dillon and should plan on additional financial resources to cover the costs of these experiences.

Experience in Cultural Diversity
All candidates in teacher education must complete a supervised field experience in a setting that serves persons of a culturally different background than that of the candidate. This experience must be completed prior to student teaching as part of EDU 311. The field experience in cultural diversity must involve interaction with the students in the diverse setting thus providing a better understanding of the cultural group in relation to teaching and learning.

Behavioral Expectations
Every candidate who engages in a field experience or student teaching will undergo a state and federal background check and behavioral review by the Director of Field Experiences and faculty. Students who have documented misconduct or background check discrepancies will be required to meet with an appropriate administrator or the Teacher Education Council to discuss an appropriate plan of action. Background checks are an additional expense for teacher candidates and may be required multiple times.

Application to Student Teach
Student teaching is the culmination of the undergraduate teacher preparation program. It provides the candidate with classroom practice under the guidance of an experienced teacher in a field setting. Student teaching requires one full semester (usually outside of Dillon) and should be planned accordingly.
The *Application to Student Teach* is an important part of the candidate’s journey toward becoming a certified teacher. Teacher candidates planning to student teach must attend a series of student teaching meetings and apply for student teaching one full semester in advance. The application has several general requirements and requires that the portfolio initially begun in the TEP admission process be presented again to demonstrate additional competencies under all ten of the effective teaching standards.

Review of the *Application to Student Teach* is conducted by the Director of Field Experiences. Candidates are notified of their placement by the Director of Field Experiences and may not make arrangements on their own with school administrators or supervising teachers.

### Student Teaching Fees & Course Registration

Regular semester fees are in effect during the semester of student teaching. Candidates planning to student teach should register for the following courses pertinent to their Major/Minor areas:

- **EDU 495 Student Teaching: K-8** Kindergarten through Grade 8
- **EDU 495 Student Teaching: 5-12** Grades 5 through 12
- **EDU 495 Student Teaching: K-12** Kindergarten through Grade 12

Student teaching assignments comprise 12-16 weeks of student teaching in a program designed with the advice of the Director of Field Experiences.

### Student Teaching Expectations

Involvement in extracurricular activities is a necessary part of student teaching. Candidates should plan their student teaching semester to match their school site activities and the public school calendar. The student teaching assignment is a rigorous experience and candidates are strongly discouraged from taking additional employment outside of the student teaching assignment.

A non-standard student teaching assignment is an assignment that is outside UMW’s service area. These assignments require special arrangements for supervision with other institutions and qualified individuals. The student teacher must pay any extra expenses associated with arranging a non-standard student teaching assignment. Students requesting non-standard teaching assignments must meet certain requirements, which can be obtained from the Director of Field Experiences. Applications for international non-standard teaching assignments should be submitted two semesters in advance.

### Licensure

Licensure is not automatic with graduation from UMW. Candidates must initiate the process with forms available from the Licensure Officer. Any new regulations or interpretations made during the effective dates of the UMW Catalog will be made known to students in the program.

To teac out-of-state, contact the Licensure Officer for appropriate procedures. Licensure requirements vary among states, but UMW graduates usually find they are initially qualified to teach in states other than Montana.

The State of Montana authorizes K-12 licensure in selected teaching fields. UMW offers K-12 programs in Art, Computer Science, Health & Human Performance, Library Media, Literacy, Music, Physical Education & Health, and Special Education. K-12 candidates graduate under the Secondary Education degree requirements.

All candidates seeking licensure under the following circumstances must begin the process by consulting with the Licensure Officer.

#### Licensure Programs for Students with Non-Teaching Degrees

This section applies to individuals who do not wish to obtain an Education degree, but do want to obtain a teaching license.

Candidates with bachelor’s or master’s degrees (non-Education) with a major in a subject area commonly taught in Montana for which UMW has a licensure program may enroll in a program leading to educator licensure. The degree must be from an accredited college.

To be eligible for educator licensure, candidates must:
1. complete all Major requirements with a minimum of 40 credits in a single field of specialization, with a 2.50 GPA and no grade lower than C-.
2. complete the Professional Education core requirements with a GPA of 3.0 and no grade lower than B-.
3. complete the program requirements for the Teacher Education Program, including successful review of the Phase I, Phase II, and Phase III portfolio, and either student teaching (to be completed in one semester) or internship (4 credits each semester, for at least two semesters, until all program requirements are met).

For details refer to the latest version of the Teacher Education Program Student Handbook and the portfolio requirements at [http://www.umwestern.edu/shares/education/tep.html](http://www.umwestern.edu/shares/education/tep.html).

#### Licensure Programs for Students Adding an Education Degree as a Second Degree

Montana Western considers that the General Education requirements have been met with a teaching candidate’s first bachelor’s degree. However, candidates must:
1. complete all Major and Minor requirements with a grade no lower than C- and a GPA of at least 2.50.
2. complete the Professional Education core requirements with a GPA of 3.0 and no grade lower than B-.
3. complete the program requirements for the Teacher Education Program, including successful review of the Phase I, Phase II, and Phase III portfolio, and either student teaching (to be completed in one semester), or an internship (4 credits each semester, for at least two semesters, until all program requirements are met).

For details, refer to the latest version of the Teacher Education Program Student Handbook and the portfolio requirements at [http://www.umwestern.edu/shares/education/tep.html](http://www.umwestern.edu/shares/education/tep.html).

UMW maintains a 15-credit residency requirement for the Major, and a 10-credit residency requirement for the Minor.
Teachers Who Wish to Add an Endorsement
UMW provides the means for practicing teachers to add new endorsements, such as elementary teachers who want to teach in secondary schools, and vice versa, or those wishing to add a new content area endorsement. The teacher must enroll in four credits of supervised internship every semester, for at least two semesters, until all program requirements are met. However, there may be additional content coursework or professional education courses to take in order to meet both Montana and UMW licensure requirements.

Individuals with an elementary education license who wish to obtain an endorsement in a secondary education content area must complete a teaching internship (enroll in four credits of supervised internship for at least two semesters). The length of the internship is determined by the prior teaching experience of the teacher in the area of the new endorsement. The internship must be in an appropriate secondary classroom setting.

To add an elementary education license, the internship must be in a self-contained K-8 classroom. The teacher must enroll in four credits of a supervised internship every semester, for at least two semesters, until all program requirements are met.

For individuals who are already endorsed in a secondary education content area, adding a new content area endorsement requires completion of the appropriate content coursework and methods course(s). Some other professional education courses may also be required. The individual will need to complete the equivalent of either a Major or a Minor in a subject area available at UMW. These individuals are not required to complete an internship or student teaching.

For individuals wishing to complete a new degree along with the added endorsement, any waiver of credits must be approved by the UMW Department of Education. The individual must meet all normal course and TEP requirements for completion of the UMW degree, including presenting a TEP Phase I, II, and III portfolio.

Special Teaching Options
The following are applicable under Montana educator licensure but do not necessarily apply to other states:
4. Title I regulations permit teaching of remedial courses in math, reading, and language arts under certain endorsements and conditions.
5. Minimum numbers of credits are needed to instruct certain subjects in Montana secondary schools. These minimums are built into program requirements for normal situations.
Bachelor of Science: Elementary Education

Review all introductory information on pages 85-89.

The BS: Elementary Education prepares teachers for positions in grades K-8 in rural, urban, and global classrooms. Through coursework and extensive field experiences in a variety of settings, teacher candidates are able to integrate content knowledge, curriculum, and pedagogy, with emphasis on classroom management and leadership, into effective research-based instructional practices. The Elementary Education program emphasizes integrated experiential learning based on the social constructivist philosophy.

Students majoring in Elementary Education may select the Early Childhood Education minor (available only with the BS: Elementary Education), or select from Secondary Education-approved Majors or Minors, including the K-12 programs in Art, Computer Science, Drama, Health & Human Performance, Library Media, Literacy, Music, and Special Education. In Montana, most Minors lead to licensure endorsements.

In addition, students pursuing the BS: Elementary Education may select an “Option” area to further enhance their background and potentially improve their employability. Option areas include a Coaching Option and Middle School Options in Instructional Technology, Mathematics, Earth Science, Life Science, Physical Science, and Social Studies. Although these Options are not licensure endorsements, they show evidence of additional study in these areas.

A grade of C- or higher is required in all General Education courses and all other degree requirements for non-Professional Education courses.

A grade of B- or higher is required in all Professional Education courses.

All Elementary Education candidates must purchase the Teacher Education Program Student Handbook at the UMW Bookstore during their first year at Montana Western.

The Teacher Education Program Student Handbook contains policies and procedures necessary from the first year of the program through completion.

As these requirements change periodically, candidates should review the latest Handbook yearly (http://www.umwestern.edu/shares/education).
BS: Elementary Education

Refer to pages 85-90 for information on applying for admission to the Teacher Education Program and for information regarding program requirements. The Education Department strongly recommends that candidates seek licensure in more than one subject area (by combining one teaching major with at least one teaching minor or additional major) to increase their hiring options. Also, consider adding the Early Childhood Education Minor (page 92) or the Middle School Options (pages 93-94).

<table>
<thead>
<tr>
<th>General Education Requirements</th>
<th>32</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pre-Fall 2009/10 UMW Course</strong></td>
<td><strong>OCHE Equivalent Course</strong></td>
</tr>
<tr>
<td>ENG 102 Found/Language (4)</td>
<td>WRIT 101 Coll Writing I (4)</td>
</tr>
<tr>
<td>Any Math course above MATH 095 (4)</td>
<td>Any Math course above M 095 (4)</td>
</tr>
<tr>
<td><strong>Mathematics—4 credits</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Behavioral &amp; Social Sciences—8 credits</strong></td>
<td></td>
</tr>
<tr>
<td>Any 100- or 200-level UWM course</td>
<td>CHEM 101 Intro</td>
</tr>
<tr>
<td>POLS 121 Amer Nat/State Govt (4)</td>
<td>GEO 101 Intro/Phys Geol (4)</td>
</tr>
<tr>
<td><strong>Humanities: Expressive Arts—4 credits</strong></td>
<td></td>
</tr>
<tr>
<td>ART 101 Fund/Art (4)</td>
<td>TBD</td>
</tr>
<tr>
<td>DR 101 Drama Fund (2)</td>
<td>THR 101 Intro/Theatre (4)</td>
</tr>
<tr>
<td>MUS 101 Mus Fund/Piano (2)</td>
<td>MUSI 103 Fund/Mus Creat (4)</td>
</tr>
<tr>
<td><strong>Natural Sciences—8 credits</strong></td>
<td></td>
</tr>
<tr>
<td>Select one course from each category below:</td>
<td>Select 2 from the following:</td>
</tr>
<tr>
<td><strong>Humanities: Literary &amp; Artistic Studies—4 credits</strong></td>
<td></td>
</tr>
<tr>
<td>Any 100- or 200-level UWM course</td>
<td>BIO 101 Intro/Life Sci (4)</td>
</tr>
<tr>
<td>POLS 121 Amer Nat/State Govt (4)</td>
<td>GEO 101 Intro/Geology (4)</td>
</tr>
<tr>
<td>ECON GEOG POLS 201 Wld Econ (4)</td>
<td>CHEM 101 Intro/Chem (4) or</td>
</tr>
<tr>
<td><strong>Information &amp; Technology Exam Requirement:</strong></td>
<td></td>
</tr>
<tr>
<td>If the student does not pass the UMW Information &amp; Technology Exam upon entrance to UMW, the student will take COMS 115 Computer Basics for Educators (4) to assist in passing the exam. The exam must be passed prior to admission to the Teacher Education Program (TEP).</td>
<td></td>
</tr>
<tr>
<td><strong>Major Requirements</strong></td>
<td><strong>93</strong></td>
</tr>
<tr>
<td><strong>Grade of C- or higher required in all courses</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Choose 2-4 credits from:</strong></td>
<td><strong>Choose 2-4 credits from:</strong></td>
</tr>
<tr>
<td>HHP 205 Dance Rhythm Meth/Tech I (1) and</td>
<td>DANC 285 Dance Rhythm Meth/</td>
</tr>
<tr>
<td>HHP 206 Dance Rhythm Meth/Tech II (1)</td>
<td>Tech I (1) and</td>
</tr>
<tr>
<td>ART 101 Fund/Art (4)</td>
<td>DANC 286 Dance Rhythm Meth/</td>
</tr>
<tr>
<td>DR 101 Drama Fund (2)</td>
<td>Tech II (1)</td>
</tr>
<tr>
<td>FA 101 Intro/Vis/Perf Arts (4)</td>
<td>TBD</td>
</tr>
<tr>
<td>MUS 101 Mus Fund/Piano (2)</td>
<td>MUSI 103 Fund/Mus Creat (4)</td>
</tr>
<tr>
<td><strong>Select Science course not used for General Education:</strong></td>
<td></td>
</tr>
<tr>
<td>BIO 101 Intro/Science (4)</td>
<td>GEO 101 Discover Biol (4)</td>
</tr>
<tr>
<td>GEOL 101 Intro/Geology (4)</td>
<td>CHEM 121 Intro/GenChem (4) or</td>
</tr>
<tr>
<td>CHEM 101 Intro/Chem (4) or</td>
<td>PHYX 103 Our Physcwld (4)</td>
</tr>
<tr>
<td>PHYS 101 Intro/Physics (4)</td>
<td>TBD</td>
</tr>
<tr>
<td>HHP 241 Pers/Comm Hlth</td>
<td>TBD</td>
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<table>
<thead>
<tr>
<th>Professional Education Courses—20 credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Fall 2009/10 UMW Course</td>
</tr>
<tr>
<td>ED 120 Becom/Prof Educator</td>
</tr>
<tr>
<td>--</td>
</tr>
<tr>
<td>ED 253 Psychol Found/Teach/Learn</td>
</tr>
<tr>
<td>ED 270 Lit/Lang/Texts</td>
</tr>
<tr>
<td>ED 328 Curric/Instr/Assess/Mgt (3)</td>
</tr>
<tr>
<td>ED 329 Curric/Instr/Assess/Mgt Prac (1)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Junior Year Semester A—16 credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED 425 Multicult/Global Educ (3)</td>
</tr>
<tr>
<td>ED 426 Multicult/Global Ed Prac (1)</td>
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</tr>
<tr>
<td>ED 381 Intro/Litrcy/Assess/Instr</td>
</tr>
<tr>
<td>ED 382 Intro/Litrcy/Assess/Instr Prac</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Junior Year Semester B</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Professional Sequence Part I—17 credits</strong></td>
</tr>
<tr>
<td>HIP 231 1st Aid/Safety</td>
</tr>
<tr>
<td>--</td>
</tr>
<tr>
<td>ED 234 Technol/Elem Tchers</td>
</tr>
<tr>
<td>ED 376 Arts Meth/Elem Tchers (2)</td>
</tr>
<tr>
<td>ED 379 Music/Elem Tchers (3)</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Senior Year Semester A</th>
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</thead>
<tbody>
<tr>
<td><strong>Professional Sequence Part II—16 credits</strong></td>
</tr>
<tr>
<td>--</td>
</tr>
<tr>
<td>ED 328 Curr/Instr/Assess/Mgt (3)</td>
</tr>
<tr>
<td>ED 329 Curr/Instr/Assess/Mgt Prac (1)</td>
</tr>
<tr>
<td>HIP 374 Elem School HPE (&amp; Prac)</td>
</tr>
<tr>
<td>HIP 454 Adapted PE/Rec</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Senior Year Semester B</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Student Teaching—12 credits</strong></td>
</tr>
<tr>
<td>ED 472 Stu Tchg-Elem</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Electives</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Credits Required</strong></td>
<td>128</td>
</tr>
</tbody>
</table>

Note: “TBD” = OCHE equivalent course number has not yet been determined. Use Pre-2010 UMW course.
BS: Elementary Education
Early Childhood Education Minor

This Minor is only available with the BS: Elementary Education.

Early Childhood Education Minor

<table>
<thead>
<tr>
<th>Pre-Fall 2010 UMW Course</th>
<th>OCHE Equivalent Course</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED 142 Intro/Early Chldhd¹</td>
<td>TBD</td>
<td>1</td>
</tr>
<tr>
<td>ED 143 Intro/Early Chldhd Lab¹</td>
<td>TBD</td>
<td>1</td>
</tr>
<tr>
<td>ED 144 Creat Env/Leaarning¹</td>
<td>TBD</td>
<td>2</td>
</tr>
<tr>
<td>ED 145 Creat Env/Leaarning Lab¹</td>
<td>TBD</td>
<td>1</td>
</tr>
<tr>
<td>ED 240 Pos Child Discip¹</td>
<td>TBD</td>
<td>2</td>
</tr>
<tr>
<td>ED 241 Pos Child Discip Lab¹</td>
<td>TBD</td>
<td>1</td>
</tr>
<tr>
<td>ED 242 Meet Needs/Family¹</td>
<td>TBD</td>
<td>2</td>
</tr>
<tr>
<td>ED 243 Meet Needs/Family Lab¹</td>
<td>TBD</td>
<td>1</td>
</tr>
<tr>
<td>ED 250 Child/Adoles Growth/Dev¹</td>
<td>TBD</td>
<td>3</td>
</tr>
<tr>
<td>ED 251 Child/AdolesGrwth/Dev Lab¹</td>
<td>TBD</td>
<td>1</td>
</tr>
<tr>
<td>ED 320 Erly Chldhd Curric I¹</td>
<td>TBD</td>
<td>2</td>
</tr>
<tr>
<td>ED 321 Erly Chldhd Curric I Lab¹</td>
<td>TBD</td>
<td>1</td>
</tr>
<tr>
<td>ED 324 Erly Chldhd Curric II¹</td>
<td>TBD</td>
<td>2</td>
</tr>
<tr>
<td>ED 325 Erly Chldhd Curric II Lab¹</td>
<td>TBD</td>
<td>1</td>
</tr>
<tr>
<td>ED 341 Exceptional Learner</td>
<td>TBD</td>
<td>2</td>
</tr>
<tr>
<td>ED 344 Erly Chldhd Profess</td>
<td>TBD</td>
<td>2</td>
</tr>
<tr>
<td>ED 345 Erly Chldhd Profess Lab</td>
<td>TBD</td>
<td>1</td>
</tr>
</tbody>
</table>

Total Credits 26

¹ Students must maintain a 3.0 average in these ECE core courses with no grade lower than “C-”.

The Early Childhood Education Minor is a state-recognized area of specialized competency that is an “add on” to an Elementary Education degree. This Minor gives specialized preparation in implementing developmentally appropriate practices including multi-age groupings, individualization, learning center approach, anti-bias curriculum, concrete experiences, pro-social discipline techniques, integrated curriculum, inclusion of children with special needs, and viewing parents as partners. It is designed for students planning to teach children from birth through age eight.
Many Elementary Education graduates teach in upper elementary (grades 4-8) or middle school (grades 7-8). The following option areas provide candidates with a greater depth of knowledge than can be attained within a broadfield Elementary Education Major alone. To increase their hiring options, the Education Department strongly recommends that all Elementary Education majors complete either a Minor which leads to licensure in Montana (see pages 111-114), the Early Childhood Education Minor (page 92), or one of the Middle School Option Areas listed below. These Option Areas do not lead to licensure, and must be taken in conjunction with the Elementary Education Major.

### Instructional Technology Middle School Option

An “Instructional Technology Middle School Option” transcript notation is available only with the BS: Elementary Education degree. The list of courses are in addition to those required for the BS: Elementary Education degree.

Elementary Education graduates with this option will not only be prepared to integrate technology effectively into their own curriculum and instruction, but will also be able to help others more effectively integrate technology to enhance learning and teaching in K-8 classrooms.

Refer to the Computer Science K-12 Minor if you wish to pursue a teaching license in Computer Science.

### Mathematics Middle School Option

A “Mathematics Option” transcript notation is available only with the BS: Elementary Education degree.

These courses are in addition to the mathematics courses required for the BS: Elementary Education degree. Work with a Mathematics Department faculty advisor to ensure courses are taken in the correct sequence and have all the correct prerequisites.

Refer to the Mathematics Major or Minor if you wish to pursue a Secondary Education teaching license in Mathematics.

### Earth Science Middle School Option

A “Middle School Option” transcript notation is available only with the BS: Elementary Education degree. Candidates pursuing a Science Middle School Option may substitute the Option Area for the 12 credits of science courses required for the BS: Elementary Education degree.

Refer to the Earth Science Major or Minor, or the General Science Major, if you wish to pursue a Secondary Education teaching license in Earth Science or General Science.
BS: Elementary Education
Middle School Option Areas

Life Science Middle School Option
A “Middle School Option” transcript notation is available only with the BS: Elementary Education degree. Candidates pursuing a Science Middle School Option may substitute the Option Area for the 12 credits of science courses required for the BS: Elementary Education degree.

Refer to the Biology Major or Minor, or the General Science Major, if you wish to pursue a Secondary Education teaching license in Biology or General Science.

Physical Science Middle School Option
A “Middle School Option” transcript notation is available only with the BS: Elementary Education degree. Candidates pursuing a Science Middle School Option may substitute the Option Area for the 12 credits of science courses required for the BS: Elementary Education degree.

Refer to the General Science Major if you wish to pursue a Secondary Education teaching license in General Science.

Social Studies Middle School Option
A “Social Studies Option” transcript notation is available only with the BS: Elementary Education degree.

Refer to the Social Science Broadfield major, or the History Major or Minor, if you wish to pursue a Secondary Education teaching license in History or Social Science.

<table>
<thead>
<tr>
<th>Pre-Fall 2009/10 UMW Course</th>
<th>OCHI Equivalent Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 111 Biology I</td>
<td>BIOB 160 Prin/Living Syst</td>
</tr>
<tr>
<td>BIO 112 Biology II</td>
<td>BIOB 170 Prin/Biol Diversity</td>
</tr>
<tr>
<td>Select 1 from the following:</td>
<td>4</td>
</tr>
<tr>
<td>BIO 214 Gen Botany (4)</td>
<td>BIOB 220 Gen Botany (4)</td>
</tr>
<tr>
<td>BIO 153 Surv/MTWild/Hab (4)</td>
<td>BIOB 101 Surv/MTWild/Hab (4)</td>
</tr>
<tr>
<td>BIO 222 Invasive Species (4)</td>
<td>BIO 222 Invasive Species (4)</td>
</tr>
<tr>
<td>BIO 255 Cell Biology (4)</td>
<td>BIOE 260 Cell/Molec Biol (4)</td>
</tr>
<tr>
<td>BIO 270 Conserv Biol (4)</td>
<td>BIOE 250 Conserv Biol (4)</td>
</tr>
<tr>
<td>BIO 273 Entomology (4)</td>
<td>BIOE 262 Intro/Entomol (4)</td>
</tr>
<tr>
<td>Select 1 from the following:</td>
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<tr>
<td>BIO 262 Microbiology (4)</td>
<td>BIOE 260 Gen Microbiol (4)</td>
</tr>
<tr>
<td>BIO 343 Genetics (4)</td>
<td>BIOE 375 Gen Genetics (4)</td>
</tr>
<tr>
<td>BIO 355 Systemat Botany (4)</td>
<td>BIOO 435 Plant Syst (4)</td>
</tr>
<tr>
<td>BIO 371 Hum Anat/Physiol (4)</td>
<td>TBD</td>
</tr>
<tr>
<td>BIO 450 Evolution (4)</td>
<td>BIOE 420 Evolution (4)</td>
</tr>
<tr>
<td>BIO 473 Ornithology (4)</td>
<td>BIOE 470 Ornithology (4)</td>
</tr>
<tr>
<td>BIO 475 Mammalogy (4)</td>
<td>BIOO 475 Mammalogy (4)</td>
</tr>
<tr>
<td>BIO 477 Ecology (4)</td>
<td>BIOE 470 Gen Ecology (4)</td>
</tr>
<tr>
<td>BIO 479 Vert Zoology (4)</td>
<td>BIOE 430 Vert Zool (4)</td>
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<tr>
<td>Select 1 from the following:</td>
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<tr>
<td>CHEM 101 Intro to Chem (4)</td>
<td>CHMY 121 Intro/Gen Chem (4)</td>
</tr>
<tr>
<td>CHEM 131 Gen Chem (4)</td>
<td>CHMY 141 Coll Chem I (4)</td>
</tr>
<tr>
<td>Select 1 from the following:</td>
<td>4</td>
</tr>
<tr>
<td>GEOL 101 Intro to Geol (4)</td>
<td>GEO 101 Intro/Phys Geol (4)</td>
</tr>
<tr>
<td>GEOL 150 Envil Geol (4)</td>
<td>GEO 103 Intro/Envil Geol (4)</td>
</tr>
<tr>
<td>Total Credits</td>
<td>24*</td>
</tr>
<tr>
<td>(*includes the 12 credits required for the Elementary Ed degree)</td>
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</table>

<table>
<thead>
<tr>
<th>Pre-Fall 2009/10 UMW Course</th>
<th>OCHI Equivalent Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 131 Intro to Chem (4)</td>
<td>CHMY 141 Coll Chem I (4)</td>
</tr>
<tr>
<td>CHEM 132 Gen Chem (4)</td>
<td>CHMY 143 Coll Chem II (4)</td>
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<tr>
<td>PHYS 101 Intro/Physics</td>
<td>PHYS 103 Our Physical World</td>
</tr>
<tr>
<td>Select 1 from the following:</td>
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<tr>
<td>PHYS 239 Phys Meteorol (4)</td>
<td>PSX 239 Phys Meteorol (4)</td>
</tr>
<tr>
<td>PHYS 240 Astronomy (4)</td>
<td>ISTR 110 Intro/Astronomy (4)</td>
</tr>
<tr>
<td>Select 1 from the following:</td>
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<tr>
<td>BIO 101 Intro/Life Science (4)</td>
<td>BIO 101 Discover Biol (4)</td>
</tr>
<tr>
<td>BIO 111 Biology I (4)</td>
<td>BIO 160 Prin/Living Syst (4)</td>
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<tr>
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<tr>
<td>GEOL 101 Intro to Geol (4)</td>
<td>GEO 101 Intro/Phys Geol (4)</td>
</tr>
<tr>
<td>GEOL 150 Envil Geol (4)</td>
<td>GEO 103 Intro/Envil Geol (4)</td>
</tr>
<tr>
<td>Total Credits</td>
<td>24*</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Pre-Fall 2009/10 UMW Course</th>
<th>OCHI Equivalent Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 105 Intro/Cirl Anthro</td>
<td>TBD</td>
</tr>
<tr>
<td>HIST 111 Amer Hist/Civil War</td>
<td>ISTA 101 Amer Hist I</td>
</tr>
<tr>
<td>HIST 112 Amer Hist/Reconstr</td>
<td>ISTA 102 Amer Hist II</td>
</tr>
<tr>
<td>HIST 371 MT/Amer West</td>
<td>ISTA 355 MT/Amer West</td>
</tr>
<tr>
<td>POLS 121 Amer Nil/St Govt</td>
<td>ISTR 121 Amer/Nil/St Govt</td>
</tr>
<tr>
<td>Select 1 from the following:</td>
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<tr>
<td>ECON/GEOG/POLS Wrld Econ (4)</td>
<td>SSS 201 World Econ (4)</td>
</tr>
<tr>
<td>GEOG 102 Human Geog (4)</td>
<td>GPHY 121 Human Geog (4)</td>
</tr>
<tr>
<td>GEOG/POLS 202 Reg Geog/No Amer (4)</td>
<td>SSS 202 Poli Geog/Rocky Mtn West (4)</td>
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<tr>
<td>Select 1 from the following:</td>
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</tr>
<tr>
<td>HIST 101 Europ Civ I (4)</td>
<td>ISTR 101 West Civ I (4)</td>
</tr>
<tr>
<td>HIST 102 Europ Civ II (4)</td>
<td>ISTR 102 West Civ II (4)</td>
</tr>
<tr>
<td>Select 1 from the following:</td>
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</tr>
<tr>
<td>PSY 100 Gen Psych (4)</td>
<td>PSX 100 Intro/Psych (4)</td>
</tr>
<tr>
<td>PSY 201 Intro/Cognition (4)</td>
<td>PSX 280 Fund/Mem/Cog (4)</td>
</tr>
<tr>
<td>SOC 115 Intro/Sociology (4)</td>
<td>SOCI 101 Intro/Sociology (4)</td>
</tr>
<tr>
<td>Select 1 from the following:</td>
<td>4</td>
</tr>
<tr>
<td>ANTH/HIST/POLS/PSY/509</td>
<td>ANTH 409 Seminar (4) or HSTA/ISTR/PSCI/PSY/SOCI 494 Sem/Weeklp (4)</td>
</tr>
<tr>
<td>Seminar (4)</td>
<td>HIST 225 Africa/Mid East (4)</td>
</tr>
<tr>
<td>Select 1 from the following:</td>
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<tr>
<td>Total Credits</td>
<td>36*</td>
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<td>(*includes the 8 credits required for the Elementary Ed degree)</td>
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</tbody>
</table>
Bachelor of Science: 
Secondary Education and K-12 Education

Teacher education candidates in Secondary Education or K-12 Education must complete at least one Major or Broadfield Major in a subject that leads to licensure in Montana. Graduates with a Secondary Education major are prepared to teach grades 5-12. Graduates with a K-12 education major are prepared to teach grades K-12. Refer to pages 85-89 in this catalog, and the UMW Teacher Education Program (TEP) Student Handbook, updated annually (http://www.umwestern.edu/education/), for further details on education program requirements, including grade and GPA requirements and other admission and retention requirements.

It is advantageous to the candidate to have multiple teaching areas (majors or minors), or a broadfield or interdisciplinary major that prepares them to teach multiple subjects, or a K-12 licensure area, especially if planning to teach in a rural state such as Montana. In Montana, teachers are licensed to teach in their Minor subject area if they have taken the appropriate methods course, complete a student teaching experience in the specified area, and receive acceptable scores on the applicable PRAXIS II exams.

- A grade of C- or higher is required in all General Education courses and required courses in the content major or minor.
- A grade of B- or higher is required in all required Professional Education courses.
- All candidates must pass the UMW Information & Technology Literacy Exam (computer competency) prior to admission to the Teacher Education Program. COMS 115 prepares students for this exam.
- All candidates must pass a recent federal and state Criminal Background Check prior to admission to the Teacher Education Program. This must be updated every two years.
- All candidates must have a recent Certificate of First Aid and Safety (including First Aid, Infant, Child, & Adult CPR, Child & Adult AED), prior to Student Teaching. HHP 231 fulfills this requirement.

<table>
<thead>
<tr>
<th>Preferred Sequence of Education Courses and TEP Portfolio/Interviews</th>
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</thead>
<tbody>
<tr>
<td><strong>Freshman Year</strong></td>
</tr>
<tr>
<td><strong>Fall</strong></td>
</tr>
<tr>
<td>EDU 201 Intro to Education</td>
</tr>
<tr>
<td>EDU 222 Ed Psych &amp; Child Develop</td>
</tr>
</tbody>
</table>

The University of Montana Western Catalog 2010-2011
BS: Secondary Education
Art K-12 Major

Refer to pages 85-89 for information on applying for admission to the Teacher Education Program and for information regarding program requirements. The Education Department strongly recommends that candidates seek licensure in more than one subject area (by combining one teaching major with at least one teaching minor or additional major) to increase their hiring options. A Coaching Option is also available with any teaching major, but does not lead to licensure.

General Education (page 42) General Education Credits 31-32

| Taking ART rubric courses is recommended to fulfill both Gen Ed Humanities categories for this Major |

Information & Technology Exam Requirement: If student does not pass the UMW Information & Technology Exam upon entrance to UMW, student will take COMS 115 Computer Basics for Educators (4) to assist in passing the exam. The exam must be passed prior to admission to the Teacher Education Program (TEP).

Art K-12 Major Core Major Credits 44

<table>
<thead>
<tr>
<th>Pre-Fall 2009/10 UMW Course</th>
<th>OCHE Equivalent Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 140 Color &amp; Design</td>
<td>TBD</td>
</tr>
<tr>
<td>ART 141 Drawing</td>
<td>TBD</td>
</tr>
<tr>
<td>ART 211 Art History I</td>
<td>TBD</td>
</tr>
<tr>
<td>ART 212 Art History II</td>
<td>TBD</td>
</tr>
<tr>
<td>ART 271 Sculpture</td>
<td>TBD</td>
</tr>
</tbody>
</table>

In consultation with advisor, select two 2-D courses, one 3-D course, and one additional 200-level studio elective course from the following: 16

ART 170 Intro/Photog [2-D] (4) TBD
ART 225 Digital Media [2-D] (4) TBD
ART 231 Ceramics [3-D] (4) TBD
ART 243 Printmaking [2-D] (4) TBD
ART 247 Glass [3-D] (4) TBD
ART 261 Watercolor [2-D] (4) TBD
ART 267 Painting [2-D] (4) TBD
ART 270 Photography [2-D] (4) TBD
ART 277 Fibers [3-D] (4) TBD

Two 300-level Art courses 8

Professional Education Core (see page 95 for recommended course sequence) Professional Ed Core Credits 30

| ED 120 Becon/Prof Educator | EDU 201 Intro/Ed w/Fld Exp | 4 |
| ED 253 Psy Found Teach/Learn | EDU 222 Ed Psy/Child Devel | 4 |
| ED 328 Curr/Instru/Assess/Mgt (3) | EDU 340 Classroom Mgt (4) | 4 |
| ED 329 Curr/Inst/Assess/Mgt Prac (1) | EDU 382 Assess/Instr (4) | 4 |
| ED 425 Multictrl/Global Ed (3) | EDU 311 Cultv/Divers/Ethics in Global Educ (4) | 4 |
| ED 426 Multictrl/Global Ed Prac (1) | | |
| ED 445 Meth/Tchg Cont Area Litrcy | EDU 481 Content Area Ltrcy | 2 |
| ART 351 Meth/Materials of Art | TBD | 4 |

Take 1 from the following: 4

HHP 241 Pers/Comm Health (4) TBD
HHP 245 Human Sexuality (4) TBD

*Students are strongly encouraged to take ANTH 105 as an elective prior to enrolling in ED 425/426 (EDU 311). A recent certificate of first aid & safety (including child & adult CPR and AED, & infant CPR) is required of all education majors prior to student teaching. HHP 231 is recommended to fulfill this requirement.

Electives Elective Credits 10-11

Select from any catalog courses 10-11

Student Teaching (concurrent enrollment in same semester) Student Teaching Credits 12

| ED 474 Stu Teaching K-12 | EDU 495 Stu Tchg: K-12 | 8 |
| -- | EDU 306 Schl Law/Advoc/All K-12 Lrns | 4 |

TOTAL CREDITS REQUIRED 128
Refer to pages 85-89 for information on applying for admission to the Teacher Education Program and for information regarding program requirements. The Education Department strongly recommends that candidates seek licensure in more than one subject area (by combining one teaching major with at least one teaching minor or additional major) to increase their hiring options. A Coaching Option is also available with any teaching major, but does not lead to licensure.

General Education (page 42)
Taking ART rubric courses is recommended to fulfill both Gen Ed Humanities categories for this Major.

Information & Technology Exam Requirement: If student does not pass the UMW Information & Technology Exam upon entrance to UMW, student will take COMS 115 Computer Basics for Educators (4) to assist in passing the exam. The exam must be passed prior to admission to the Teacher Education Program (TEP).

Art K-12 Broadfield Major Core
Pre-Fall 2010 UMW Course | OCHE Equivalent Course | Major Credits
--- | --- | ---
ART 140 Color/Design | TBD | 4
ART 141 Drawing | TBD | 4
ART 211 Art History I | TBD | 4
ART 212 Art History II | TBD | 4
ART 271 Sculpture | TBD | 4

In consultation with advisor, select two 2-D courses, one 3-D course, and one additional 200-level studio elective from:

<table>
<thead>
<tr>
<th>Pre-Fall 2010 UMW Course</th>
<th>OCHE Equivalent Course</th>
<th>Major Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 170 Intro/Photog [2-D] (4)</td>
<td>TBD</td>
<td></td>
</tr>
<tr>
<td>ART 225 Digital Media [2-D] (4)</td>
<td>TBD</td>
<td></td>
</tr>
<tr>
<td>ART 231 Ceramics [3-D] (4)</td>
<td>TBD</td>
<td></td>
</tr>
<tr>
<td>ART 243 Printmaking [2-D] (4)</td>
<td>TBD</td>
<td></td>
</tr>
<tr>
<td>ART 247 Glass [3-D] (4)</td>
<td>TBD</td>
<td></td>
</tr>
<tr>
<td>ART 261 Watercolor [2-D] (4)</td>
<td>TBD</td>
<td></td>
</tr>
<tr>
<td>ART 267 Painting [2-D] (4)</td>
<td>TBD</td>
<td></td>
</tr>
<tr>
<td>ART 270 Photog [2-D] (4)</td>
<td>TBD</td>
<td></td>
</tr>
<tr>
<td>ART 277 Fibers [3-D] (4)</td>
<td>TBD</td>
<td></td>
</tr>
</tbody>
</table>

In consultation with advisor, select three 300-level Art courses and 8 credits of 400-level Advanced Studio

Professional Education Core (see page 95 for recommended course sequence)
Students are strongly encouraged to take ANTH 105 as an elective prior to enrolling in ED 425/426 (EDU 311)

<table>
<thead>
<tr>
<th>Course</th>
<th>Equivalent Course</th>
<th>Major Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED 120 Becom/Prof Educator</td>
<td>EDU 201 Intro/Ed w/Fld Exper</td>
<td>4</td>
</tr>
<tr>
<td>ED 253 Psy Found Teach/Learn</td>
<td>EDU 222 Ed Psy/Child Devel</td>
<td>4</td>
</tr>
<tr>
<td>ED 328 Curr/Instruc/Assess/Mgt (3)</td>
<td>EDU 340 Classroom Mgt (4)</td>
<td>4</td>
</tr>
<tr>
<td>ED 329 Curr/Instruc/Assess/Mgt Prac (1)</td>
<td>EDU 382 Assess/Curr/Instr (4)</td>
<td>4</td>
</tr>
<tr>
<td>ED 425 Multicult/Global Ed (3)</td>
<td>EDU 311 Cultr/Divers/Ethics in Global Educ (4)</td>
<td>4</td>
</tr>
<tr>
<td>ED 426 Multicult/Global Ed Prac (1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ART 351 Meth/Mat of Art</td>
<td>TBD</td>
<td>4</td>
</tr>
<tr>
<td>HIP 241 Personal/Comm Health (4)</td>
<td>TBD</td>
<td></td>
</tr>
<tr>
<td>HIP 245 Human Sexuality (4)</td>
<td>TBD</td>
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</tbody>
</table>

Electives
Select from any catalog courses

Elective Credits

Student Teaching (concurrent enrollment in same semester)

<table>
<thead>
<tr>
<th>Course</th>
<th>Equivalent Course</th>
<th>Major Credits</th>
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</thead>
<tbody>
<tr>
<td>ED 474 Stu Teaching K-12</td>
<td>EDU 495 Stu Tchg: K-12</td>
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<tr>
<td>---</td>
<td>EDU 306 Schl Law/Advoc/All K-12 Lrns</td>
<td>4</td>
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</table>

TOTAL CREDITS REQUIRED 128
BS: Secondary Education
Biology Major

Refer to pages 85-89 for information on applying for admission to the Teacher Education Program and for information regarding program requirements. The Education Department strongly recommends that candidates seek licensure in more than one subject area (by combining one teaching major with at least one teaching minor or additional major) to increase their hiring options. For future science teachers, the General Science Broadfield Major is recommended. A Coaching Option is also available with any teaching major, but does not lead to licensure.

General Education (page 42)

<table>
<thead>
<tr>
<th>Pre-Fall 2009/10 UMW Course</th>
<th>OCHE Equivalent Course</th>
<th>General Education Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 131 Probability</td>
<td>STAT 121 Probability</td>
<td>4</td>
</tr>
<tr>
<td>BIO 111 Biology I (4)</td>
<td>BIOB 160 Prin/Living Syst (4)</td>
<td></td>
</tr>
<tr>
<td>BIO 112 Biology II (4)</td>
<td>BIOB 170 Prin/Biol Diversity (4)</td>
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<tr>
<td>Select 1 of the following:</td>
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<td>4</td>
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</tbody>
</table>

Information & Technology Exam Requirement: If student does not pass the UMW Information & Technology Exam upon entrance to UMW, student will take COMS 115 Computer Basics for Educators (4) to assist in passing the exam. The exam must be passed prior to admission to the Teacher Education Program (TEP).

Biology Major Core

Complete course not taken above as General Education: 4

<table>
<thead>
<tr>
<th>Complete course not taken above as General Education</th>
<th>Major Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 111 Biology I (4)</td>
<td>4</td>
</tr>
<tr>
<td>BIO 112 Biology II (4)</td>
<td>4</td>
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<tr>
<td>BIO 214 Gen Botany</td>
<td>4</td>
</tr>
<tr>
<td>BIO 255 Cell Biology</td>
<td>4</td>
</tr>
<tr>
<td>BIO 262 Microbiology</td>
<td>4</td>
</tr>
<tr>
<td>BIO 343 Genetics</td>
<td>4</td>
</tr>
<tr>
<td>BIO 371 Hum Anat/Physiol</td>
<td>TBD</td>
</tr>
<tr>
<td>BIO 372 Hum Anat/Physiol</td>
<td>TBD</td>
</tr>
<tr>
<td>BIO 450 Evolution</td>
<td>4</td>
</tr>
<tr>
<td>BIO 477 Ecology</td>
<td>4</td>
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<tr>
<td>CHEM 131 Gen Chem</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 132 Gen Chem</td>
<td>4</td>
</tr>
<tr>
<td>ENV/PHIL 201 Hist/Phil/Sci</td>
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</tr>
<tr>
<td>MATH 232 Statistics</td>
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Professional Education Core (see page 95 for recommended course sequence)

Professional Ed Core Credits: 30

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<tr>
<th>Course</th>
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<tbody>
<tr>
<td>ED 120 Becom/Prof Educator</td>
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<td>ED 255 Psy Found Teach/Learn</td>
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<tr>
<td>ED 328 Curr/Instr/Aess/Mgt (3)</td>
</tr>
<tr>
<td>ED 329 Curr/Instr/Aess/Mgt Prac (1)</td>
</tr>
<tr>
<td>ED 425 Mitch/tr/Global Ed (3)</td>
</tr>
<tr>
<td>ED 426 Mitch/tr/Global Ed Prac (1)</td>
</tr>
<tr>
<td>ED 445 Meth/Tchg Cont Area Litrcy</td>
</tr>
<tr>
<td>ED 355 Meth/Mat/Exper Sci Ed</td>
</tr>
<tr>
<td>HHP 241 Pers/Comm Hlth (4)</td>
</tr>
<tr>
<td>HHP 245 Human Sexuality (4)</td>
</tr>
<tr>
<td>Select 1 from the following:</td>
</tr>
<tr>
<td>HHP 231 Cultr/Divers/Instr (4)</td>
</tr>
<tr>
<td>HHP 231 Cultr/Divers/Instr Prac (1)</td>
</tr>
</tbody>
</table>

A recent certificate of first aid & safety (including child & adult CPR and AED, & infant CPR) is required of all education majors prior to student teaching. HHP 231 is recommended to fulfill this requirement.

Electives: 2-3

Student Teaching (concurrent enrollment in same semester)

Student Teaching Credits: 12

Elective Credits: 2-3

TOTAL CREDITS REQUIRED: 128
BS: Secondary Education
Business & Computer Applications Major

Refer to pages 85-89 for information on applying for admission to the Teacher Education Program and for information regarding program requirements. The Education Department strongly recommends that candidates seek licensure in more than one subject area (by combining one teaching major with at least one teaching minor or additional major) to increase their hiring options. A Coaching Option is also available with any teaching major, but does not lead to licensure.

General Education (page 42)

<table>
<thead>
<tr>
<th>Pre-Fall 2009/10 UMW Course</th>
<th>OCHE Equivalent Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 250 Prin/Economics</td>
<td>ECNS 203 Prin/Micro/Macro</td>
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</table>

Information & Technology Exam Requirement: If student does not pass the UM Information & Technology Exam upon entrance to UM, student will take COMS 115 Computer Basics for Educators (4) to assist in passing the exam. The exam must be passed prior to admission to the Teacher Education Program (TEP).

Business & Computer Applications Major Core

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>BUS 201</td>
<td>Small Bus Development</td>
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</tr>
<tr>
<td>BUS 217</td>
<td>Bus/Elec Comm</td>
<td>4</td>
</tr>
<tr>
<td>BUS 241</td>
<td>Fin Acctng</td>
<td>3</td>
</tr>
<tr>
<td>BUS 242</td>
<td>Managerial Acctng</td>
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<tr>
<td>BUS 280</td>
<td>Business Law</td>
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<td>COMS 101</td>
<td>Intro/Comp/Pres</td>
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<tr>
<td>COMS 135</td>
<td>Microcomp Appl</td>
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</tr>
<tr>
<td>COMS 205</td>
<td>Business Info Systems</td>
<td>TBD</td>
</tr>
<tr>
<td>COMS 210</td>
<td>Comp Hdw/Sftwr Mgt</td>
<td>TBD</td>
</tr>
<tr>
<td>COMS 236</td>
<td>Adv Microcomp Appl</td>
<td>TBD</td>
</tr>
<tr>
<td>COMS 212</td>
<td>Intro/Web Design</td>
<td>TBD</td>
</tr>
<tr>
<td>BUS 325</td>
<td>Print/Prac/Management</td>
<td>TBD</td>
</tr>
<tr>
<td>BUS 347</td>
<td>Print/Prac/Marketing</td>
<td>TBD</td>
</tr>
<tr>
<td>BUS 304</td>
<td>Leadership (4)</td>
<td>TBD</td>
</tr>
<tr>
<td>BUS 329</td>
<td>Human Resource Mgt (3)</td>
<td>TBD</td>
</tr>
<tr>
<td>COMS 111</td>
<td>Prog Fundamentals (3)</td>
<td>TBD</td>
</tr>
<tr>
<td>COMS 235</td>
<td>Video/Audio Design (4)</td>
<td>TBD</td>
</tr>
<tr>
<td>COMS 242</td>
<td>Dig Print Media (4)</td>
<td>TBD</td>
</tr>
<tr>
<td>COMS 306</td>
<td>Bus Info Syst Lab (3)</td>
<td>TBD</td>
</tr>
<tr>
<td>COMS 325</td>
<td>Dig Graph/Anim Design (4)</td>
<td>TBD</td>
</tr>
<tr>
<td>COMS 335</td>
<td>Adv Web Design (4)</td>
<td>TBD</td>
</tr>
<tr>
<td>Select 2 courses from the following:</td>
<td>Select 2 courses from the following:</td>
<td></td>
</tr>
<tr>
<td>BUS 351</td>
<td>Meth/Mat/Bus Theory Subj</td>
<td>TBD</td>
</tr>
<tr>
<td>COMS 351</td>
<td>Meth/Mat/Comp Ap precaution</td>
<td>TBD</td>
</tr>
<tr>
<td>Select 1 from the following:</td>
<td>Select 1 from the following:</td>
<td></td>
</tr>
<tr>
<td>HHP 241</td>
<td>Personal/Comn Health (4)</td>
<td>TBD</td>
</tr>
<tr>
<td>HHP 245</td>
<td>Human Sexuality (4)</td>
<td>TBD</td>
</tr>
</tbody>
</table>

Professional Education Core (see page 95 for recommended course sequence)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED 120</td>
<td>Becom/Prof Educator</td>
<td>4</td>
</tr>
<tr>
<td>ED 253</td>
<td>Psy Found Teach/Learn</td>
<td>4</td>
</tr>
<tr>
<td>ED 328</td>
<td>Curr/Instruc/Assess/Mgt (5)</td>
<td>4</td>
</tr>
<tr>
<td>ED 329</td>
<td>Curr/Inst/Assess/Mgt Prac (1)</td>
<td>4</td>
</tr>
<tr>
<td>ED 425</td>
<td>Milth Merrill/Global Ed (3)</td>
<td>4</td>
</tr>
<tr>
<td>ED 426</td>
<td>Milth Merrill/Global Ed Prac (1)</td>
<td>4</td>
</tr>
<tr>
<td>ED 445</td>
<td>Meth/Tchg Cont Area Ltrcy</td>
<td>2</td>
</tr>
<tr>
<td>BUS 354</td>
<td>Meth/Mat/Bus Theory Subj</td>
<td>2</td>
</tr>
<tr>
<td>COMS 351</td>
<td>Meth/Mat/Comp Ap precaution</td>
<td>2</td>
</tr>
<tr>
<td>Select 1 from the following:</td>
<td>Select 1 from the following:</td>
<td></td>
</tr>
<tr>
<td>HHP 241</td>
<td>Personal/Comn Health (4)</td>
<td>TBD</td>
</tr>
<tr>
<td>HHP 245</td>
<td>Human Sexuality (4)</td>
<td>TBD</td>
</tr>
</tbody>
</table>

Electives

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select from any catalog courses</td>
<td>Select from any catalog courses</td>
<td></td>
</tr>
</tbody>
</table>

Student Teaching (concurrent enrollment in same semester)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED 473</td>
<td>Stu Teaching-Secondary</td>
<td>8</td>
</tr>
<tr>
<td>--</td>
<td>ED 495 Stu Tchg: 5-12</td>
<td>TBD</td>
</tr>
<tr>
<td>--</td>
<td>ED 306 Schl Law/Advoc/All K-12 Lrns</td>
<td>TBD</td>
</tr>
</tbody>
</table>

TOTAL CREDITS REQUIRED 128
BS: Secondary Education

Business & Computer Applications Broadfield Major

Refer to pages 85-89 for information on applying for admission to the Teacher Education Program and for information regarding program requirements. The Education Department strongly recommends that candidates seek licensure in more than one subject area (by combining one teaching major with at least one teaching minor or additional major) to increase their hiring options. A Coaching Option is also available with any teaching major, but does not lead to licensure.

General Education (page 42)

<table>
<thead>
<tr>
<th>Pre-Fall 2009/10 UMW Course</th>
<th>OCHE Equivalent Course</th>
<th>General Education Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 250 Prin/Economics</td>
<td>ECNS 203 Prin/Micro/Macro</td>
<td>4</td>
</tr>
</tbody>
</table>

General Education Credits 31-32

Information & Technology Exam Requirement: If student does not pass the UMW Information & Technology Exam upon entrance to UMW, student will take COMS 115 Computer Basics for Educators (4) to assist in passing the exam. The exam must be passed prior to admission to the Teacher Education Program (TEP).

Business & Computer Applications Broadfield Major Core

<table>
<thead>
<tr>
<th>Major Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>52-54</td>
</tr>
</tbody>
</table>

| BUS 201 Small Bus Development | TBD | 3   |
| BUS 217 Bus/Electric Comm     | TBD | 4   |
| BUS 241 Financial Acctng      | ACTG 201 Prin/Fin Acctng | 3   |
| BUS 242 Managerial Acctng     | ACTG 202 Prin/Mngrl Acctng | 3   |
| BUS 280 Business Law          | TBD | 4   |
| COMS 101 Intro/Comp/Pres      | CAPP 100 Shl Crs: Comp Litrcy | 1   |
| COMS 135 Microcomp Appl       | CAPP 131 Basic MS Office   | 4   |
| COMS 205 Bus Info Sysms       | TBD | 4   |
| COMS 210 Comp Hrdwr/Sftwr Mgt| TS 205 Comp Hrdwr/Sftwr Mgt | 4   |
| COMS 212 Intro/Web Design     | TBD | 4   |
| COMS 236 Adv Microcomp Appl   | CAPP 251 Adv MS Office     | 4   |
| COMS 403 Syst Analysis/Design | TS 403 Syst Analysis/Design | 4   |

Select 2 from the following: 6-7

| BUS 202 Customer Service (3) | TBD |
| BUS 304 Leadership (4)       | TBD |
| BUS 325 Prin/Pract/Mgt (3)   | TBD |
| BUS 347 Prin/Pract/Mktng (3) | TBD |

Select 2 from the following: 4-5

| COMS 111 Programming Fund (3) | TBD |
| COMS 176 Intro/Router Technol  | TS 176 Intro/Router Technol (4) |
| COMS 234 Adv Multimedia (2)   | CAPP 160 Mtimnd: MS Publ/Ppt (2) |
| COMS 387 Telecomm (3)         | TBD |
| COMS 420 Cert/Hrd/Sft/Netwrkg (4) | TS 420 Cert/Hrd/Sft/Netwrkg (4) |

Professional Education Core (see page 95 for recommended course sequence)

<table>
<thead>
<tr>
<th>Professional Ed Core Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>30</td>
</tr>
</tbody>
</table>

| ED 120 Becom/Pf Educator   | EDU 201 Intro/Ed w/Fd Exper | 4 |
| ED 253 Psy Found Teach/Learn | EDU 222 Ed Psy/Child Devel | 4 |
| ED 328 Curr/Instr/Assess/Mgt (3) | EDU 340 Classroom Mgt (4) | 4 |
| ED 329 Curr/Instr/Assess/Mgt Prac (1) | EDU 382 Assess/Curr/Instr (4) | 4 |
| ED 425 Mtltcrtrl/Global Ed¹ (3) | EDU 311 Cldr/Divers/Ethics in Global Educ¹ (4) | 4 |
| ED 426 Mtltcrtrl/Global Ed Prac¹ (1) | TBD |
| ED 445 Meth/Tchng Cont Area Litrcy | EDU 481 Content Area Litrcy | 2 |
| COMS 351 Meth/Mat/Comp Appl | TBD | 2 |
| BUS 351 Meth/Mat/Bus Theory Subj | TBD |

Select 1 from 4:

| HIP 241 Pers/Comm Health (4) | TBD |
| HIP 245 Human Sexuality (4)  | TBD |

Students are strongly encouraged to take ANTH 105 as an elective prior to enrolling in ED 425/426 (EDU 311)

A recent certificate of first aid & safety (including child & adult CPR and AED, & infant CPR) is required of all education majors prior to student teaching. HIP 241 is recommended to fulfill this requirement.

Elective Credits 0-3

Student Teaching (concurrent enrollment in same semester)

<table>
<thead>
<tr>
<th>Student Teaching Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
</tr>
</tbody>
</table>

| ED 473 Stu Teaching-Secondary | EDU 495 Stu Tchng: 5-12 | 8 |
| ---                           | EDU 306 Schl Law/Advoc/All K-12 Lrnrs | 4 |

TOTAL CREDITS REQUIRED 128
**Business & Computer Applications:**
**Advising Protocol for Educator Licensure**
(for students who already have a Bachelor’s Degree in Business and are seeking a teaching license)

Refer to pages 85-89 for information on applying for admission to the Teacher Education Program and for information regarding program requirements. The Education Department strongly recommends that candidates seek licensure in more than one subject area (by combining one teaching major with at least one teaching minor or additional major) to increase their hiring options. A Coaching Option is also available with any teaching major, but does not lead to licensure.

**Required:**
1. Bachelor’s degree in Business.
2. Must meet the following minimum requirements for entrance into the Teacher Education Program (TEP):
   a. 2.50 overall GPA in undergraduate Business degree program, with no grade lower than C- in courses required for the major.
   b. Completion of the TEP application form.
3. Must complete all requirements of TEP, including presenting a Phase I, Phase II, and Phase III portfolio.
4. Must pass a criminal background check prior to being admitted to the field experiences for the professional education classes and prior to student teaching.
5. Contact the Director of Field Experiences for licensure information.

Following is the class layout for those students who already have obtained a BS: Business Administration and would like to get their teaching certification. Students must complete the required education courses below:

<table>
<thead>
<tr>
<th>Pre-Fall 2009/10 UMW Course</th>
<th>OCHE Equivalent Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 351 Methods/Materials/Business Theory Subjects</td>
<td>FBD</td>
</tr>
<tr>
<td>COMS 351 Methods/Materials in Computer Applications</td>
<td>FBD</td>
</tr>
<tr>
<td>ED 120 Becoming a Professional Educator</td>
<td>EDU 201 Intro/Ed w/Fld Exper</td>
</tr>
<tr>
<td>ED 253 Psychol Foundations of Teach/Learn</td>
<td>EDU 222 Ed Psy/Child Devel</td>
</tr>
<tr>
<td>ED 328 Curric/Instruction/Assess/Mgt (3)</td>
<td>EDU 382 Assess/Curric/Instruction</td>
</tr>
<tr>
<td>ED 329 Curric/Instruction/Assess/Mgt Prac (1)</td>
<td>EDU 340 Classroom Mgt</td>
</tr>
<tr>
<td>ED 425 Multicultural/Global Ed (3)</td>
<td>EDU 311 Cult/Divers/Ethics in Global Educ (4)</td>
</tr>
<tr>
<td>ED 426 Multicultural/Global Ed Prac (1)</td>
<td></td>
</tr>
<tr>
<td>ED 445 Meth/Tchg Cont Area Litrcy</td>
<td>EDU 481 Content Area Litrcy</td>
</tr>
<tr>
<td>ED 473 Student Teaching-Secondary</td>
<td>EDU 495 Student Teaching: 5-12</td>
</tr>
<tr>
<td>Select 1 from the following:</td>
<td></td>
</tr>
<tr>
<td>HHP 241 Pers/Community Health (4)</td>
<td>FBD</td>
</tr>
<tr>
<td>HHP 245 Human Sexuality (4)</td>
<td>FBD</td>
</tr>
</tbody>
</table>

Students may also be required to take additional computer application courses depending upon the courses they have previously taken:

| COMS 212 Introduction to Web Design (4)                      | FBD                             |
| COMS 205 Business Information Systems (4)                   | FBD                             |
| COMS 210 Computer Hardware/Software Mgt (4)                  | TS 205 Computer Hardware/Software Mgt (4) |
| COMS 135 Microcomputer Applications (4)                     | CAPP 131 Basic MS Office (4)     |
| COMS 236 Adv Microcomputer Applications (4)                 | CAPP 251 Adv MS Office (4)       |
| COMS 339 Database Mgt (3)                                    | FBD                             |

**For Those Who Already Hold a Teaching License**
For individuals who already hold a teaching license in another secondary education content area, adding a new content area endorsement in Business & Computer Applications requires completion of appropriate content coursework, including COMS 351 and BUS 351. Some professional education courses may be waived. These individuals are not required to complete student teaching (ED 473/EDU 495) or an internship, unless seeking an additional degree. Individuals with an elementary education license must complete a teaching internship in an appropriate secondary classroom (4 credits of supervised internship for at least two semesters).
BS: Secondary Education  
Earth Science Major

Refer to pages 85-89 for information on applying for admission to the Teacher Education Program and for information regarding program requirements. The Education Department strongly recommends that candidates seek licensure in more than one subject area (by combining one teaching major with at least one teaching minor or additional major) to increase their hiring options. For future science teachers, the General Science Broadfield major is recommended. A Coaching Option is also available with any teaching major, but does not lead to licensure.

### General Education (page 42)

<table>
<thead>
<tr>
<th>Pre-Fall 2009/10 UMW Course</th>
<th>OCHE Equivalent Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 131 General Chemistry</td>
<td>CHMY 141 Coll Chem I</td>
</tr>
<tr>
<td>MATH 131 Probability</td>
<td>STAT 212 Probability</td>
</tr>
<tr>
<td>Select 1 from the following</td>
<td></td>
</tr>
<tr>
<td>GEOL 101 Intro to Geology</td>
<td>GEO 101 Intro/Phys Geol</td>
</tr>
<tr>
<td>GEOL 150 Envtl Geology</td>
<td>GEO 103 Intro/Envtl Geol</td>
</tr>
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</table>

#### General Education Credits 31-32

#### Earth Science Major Core

<table>
<thead>
<tr>
<th>Course</th>
<th>Major Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 132 Gen Chem</td>
<td></td>
</tr>
<tr>
<td>ENV 201 Hist/Phil/Science</td>
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</tr>
<tr>
<td>ENV 248 Soil Science</td>
<td></td>
</tr>
<tr>
<td>GEOL 226 Rocks/Min/Res</td>
<td></td>
</tr>
<tr>
<td>GEOL 230 Geol/Amer West</td>
<td></td>
</tr>
<tr>
<td>GEOL 330 Structure/Teotronics</td>
<td></td>
</tr>
<tr>
<td>GEOL 378 Surficial Process</td>
<td></td>
</tr>
<tr>
<td>GEOL 409 Geology Seminar</td>
<td></td>
</tr>
<tr>
<td>GEOL 422 Depositional Envi 1</td>
<td></td>
</tr>
<tr>
<td>PHYS 239 Phys Meteorol</td>
<td></td>
</tr>
<tr>
<td>PHYS 240 Astronomy</td>
<td></td>
</tr>
</tbody>
</table>

#### Professional Education Core (see page 95 for recommended course sequence)

<table>
<thead>
<tr>
<th>Course</th>
<th>Professional Ed Core Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED 120 Becom/Prof Educator</td>
<td>4</td>
</tr>
<tr>
<td>ED 253 Psy Found Teach/Leam</td>
<td>4</td>
</tr>
<tr>
<td>ED 328 Curr/Instr/Assess/Mgt(3)</td>
<td>4</td>
</tr>
<tr>
<td>ED 329 Curr/Inst/Assess/Mgt Prac(1)</td>
<td>4</td>
</tr>
<tr>
<td>ED 425 Mltichrl/Global Ed (3)</td>
<td>4</td>
</tr>
<tr>
<td>ED 426 Mltichrl/Global Ed Prac1</td>
<td>4</td>
</tr>
<tr>
<td>ED 445 Meth/Tchgh Cont Area Litrcy</td>
<td>2</td>
</tr>
<tr>
<td>ED 355 Meth/Exper Sci Educ</td>
<td>4</td>
</tr>
<tr>
<td>Select 1 from the following:</td>
<td></td>
</tr>
<tr>
<td>HHP 241 Pers/Comm Health (4)</td>
<td>TBD</td>
</tr>
<tr>
<td>HHP 245 Human Sexuality (4)</td>
<td>TBD</td>
</tr>
</tbody>
</table>

Students are strongly encouraged to take ANTH 105 as an elective prior to enrolling in ED 425/426 (EDU 311). A recent certificate of first aid & safety (including child & adult CPR and AED, & infant CPR) is required of all education majors prior to student teaching. HHP 231 is recommended to fulfill this requirement.

### Electives

<table>
<thead>
<tr>
<th>Course</th>
<th>Elective Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select from any catalog courses</td>
<td>6-7</td>
</tr>
</tbody>
</table>

### Student Teaching (concurrent enrollment in same semester)

<table>
<thead>
<tr>
<th>Course</th>
<th>Student Teaching Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED 473 Stu Teaching-Secondary</td>
<td>8</td>
</tr>
<tr>
<td>ED 495 Stu Tchgh 5-12</td>
<td>8</td>
</tr>
<tr>
<td>ED 306 Schl Law/Advoc/All K-12 Learners</td>
<td>4</td>
</tr>
</tbody>
</table>

#### TOTAL CREDITS REQUIRED 128
BS: Secondary Education
English Major

Refer to pages 85-89 for information on applying for admission to the Teacher Education Program and for information regarding program requirements. The Education Department strongly recommends that candidates seek licensure in more than one subject area (by combining one teaching major with at least one teaching minor or additional major) to increase their hiring options. A Coaching Option is also available with any teaching major, but does not lead to licensure.

General Education (page 42)

Information & Technology Exam Requirement: If student does not pass the UMW Information & Technology Exam upon entrance to UMW, student will take COMS 115 Computer Basics for Educators (4) to assist in passing the exam. The exam must be passed prior to admission to the Teacher Education Program (TEP).

General Education Credits 31-32

English Major Core

<table>
<thead>
<tr>
<th>Pre-Fall 2009/10 UMW Course</th>
<th>OCHE Equivalent Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>DR 241 Play Production/Intro to Directing</td>
<td>THTR 276 Play Prod/Intro-Directing</td>
</tr>
<tr>
<td>ENG 204 Creative Writing Workshop</td>
<td>TBD</td>
</tr>
<tr>
<td>ENG 279 Fund of Literary Theory</td>
<td>LIT 300 Literary Criticism</td>
</tr>
<tr>
<td>ENG 280 Visions of America</td>
<td>LIT 218 Visions of America</td>
</tr>
<tr>
<td>ENG 330 Mythology</td>
<td>LIT 385 Mythology</td>
</tr>
<tr>
<td>ENG 413 Hist/Struc/Nature of Language</td>
<td>TBD</td>
</tr>
<tr>
<td>ENG/DR 455 Shakespeare</td>
<td>LIT 473 Studies/Shakespeare</td>
</tr>
</tbody>
</table>

Select 1 from the following:

- ENG 263 Early Amer Voices (4)
- ENG 264 Amer Romance (4)
- ENG 265 Real/Nat/Modernists (4)
- ENG 266 Gen/Conflicts (4)
- ENG 273 Oral Trad (4)
- ENG 274 Manuscript Trad (4)
- ENG 275 Print Culture (4)
- ENG 276 Declining Empire (4)

Select 1 from the following:

- ENG 320 Lit in Translation (4)
- ENG 339 Literary Regions (4)
- ENG 360 Young Adult Lit (4)
- ENG 361 Poetry & Thought (4)
- ENG 362 Sem/Women’s Lit (4)

Select 1 from the following:

- ENG 215/216 Journalism (4)
- ENG 301 Poetry Wkshp (4)
- ENG 302 Fiction Wkshp (4)
- ENG 303 Nonfiction Wkshp (4)
- ENG 350 Tech/Prof Comm (4)

Select 1 from the following:

- ENG 401 Adv Poetry Wkshp (4)
- ENG 402 Adv Fiction Wkshp (4)
- ENG 403 Adv Nonfiction Wkshp (4)
- ENG 404 Drama Hist/Lit Genre (4)
- ENG 452 Sem/Literary Period (4)
- ENG 453 Genre Seminar (4)
- ENG 454 Authors Seminar (4)
- ENG 479 Sem/Literary Theory (4)

Professional Education Core (see page 95 for recommended course sequence)

<table>
<thead>
<tr>
<th>Professional Ed Core Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED 320 Becom/Prof Educator</td>
</tr>
<tr>
<td>ED 253 Psy Found Teach/Learn</td>
</tr>
<tr>
<td>ED 328 Curr/Instr/Assess/Mgt</td>
</tr>
<tr>
<td>ED 329 Curr/Instr/Assess/Mgt Prc (1)</td>
</tr>
<tr>
<td>ED 425 Multicult/GLOBAL Ed (3)</td>
</tr>
<tr>
<td>ED 445 Meth/Tchg Cont Area Litrcy</td>
</tr>
</tbody>
</table>

Take both courses in same semester:

- ENG 352 Meth/Teaching Composition (4)  TBD (4)
- ENG 353 Meth/Teaching Literature (4)  TBD (4)

Select 1 from the following:

- HHP 241 Personal/Comm Health (4)  TBD
- HHP 245 Human Sexuality (4)  TBD

Electives

Select from any catalog courses 6-7

Student Teaching (concurrent enrollment in same semester)

<table>
<thead>
<tr>
<th>Elective Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED 473 Stu Teaching/Secondary</td>
</tr>
<tr>
<td>ED 306 Schl Laws/Advoc/All K-12 Lrers</td>
</tr>
</tbody>
</table>

TOTAL CREDITS REQUIRED 128
BS: Secondary Education
General Science Broadfield Major

Refer to pages 85-89 for information on applying for admission to the Teacher Education Program and for information regarding program requirements. The Education Department strongly recommends that candidates seek licensure in more than one subject area (by combining one teaching major with at least one teaching minor or additional major) to increase their hiring options. The General Science major prepares candidates to teach in multiple science subjects. A Coaching Option is also available with any teaching major, but does not lead to licensure.

General Education

General Education Credits 31-32

<table>
<thead>
<tr>
<th>Pre-Fall 2009/10 UMW Course</th>
<th>OCHE Equivalent Course</th>
<th>General Education Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 201 Calculus I</td>
<td>M 171 Calculus I</td>
<td></td>
</tr>
<tr>
<td>BIO 111 Biology I</td>
<td>BIOB 160 Prin/Living Syst (4)</td>
<td></td>
</tr>
<tr>
<td>Select 1 from the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEOL 101 Intro/Geology (4)</td>
<td>GEO 101 Intro/Phys Geol (4)</td>
<td></td>
</tr>
<tr>
<td>GEOL 150 Envi Geology (4)</td>
<td>GEO 103 Intro/Envi Geol (4)</td>
<td></td>
</tr>
</tbody>
</table>

Information & Technology Exam Requirement: If student does not pass the UM Information & Technology Exam upon entrance to UM, student will take COMS 115 Computer Basics for Educators (4) to assist in passing the exam. The exam must be passed prior to admission to the Teacher Education Program (TEP).

General Science Broadfield Major Core

Major Credits 56

<table>
<thead>
<tr>
<th>Pre-Fall 2009/10 UMW Course</th>
<th>OCHE Equivalent Course</th>
<th>Major Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 214 Gen Botany</td>
<td>BIOO 220 Gen Botany</td>
<td>4</td>
</tr>
<tr>
<td>BIO 255 Cell Biology</td>
<td>BIOB 260 Cell/Molec Biol</td>
<td>4</td>
</tr>
<tr>
<td>BIO 343 Genetics</td>
<td>BIOB 375 Gen Genetics</td>
<td>4</td>
</tr>
<tr>
<td>BIO 450 Evolution</td>
<td>BIOB 420 Evolution</td>
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</tr>
<tr>
<td>CHEM 131 Gen Chem</td>
<td>CHMY 141 Coll Chem I</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 132 Gen Chem</td>
<td>CHMY 143 Coll Chem II</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 331 Organic Chem</td>
<td>CHMY 321 Organic Chem I</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 332 Organic Chem</td>
<td>CHMY 323 Organic Chem II</td>
<td>4</td>
</tr>
<tr>
<td>GEOL 226 Rocks/Mn/Res</td>
<td>GEO 226 Rocks/Mn/Res</td>
<td>4</td>
</tr>
<tr>
<td>GEOL 432 Depos Envts</td>
<td>GEO 309 Sed/Stratigraphy</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 235 Gen Physics</td>
<td>PHIX 220 Physics I</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 234 Gen Physics</td>
<td>PHIX 222 Physics II</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 235 Gen Physics III</td>
<td>PHIX 224 Physics III</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 240 Astronomy</td>
<td>ASTR 110 Intro/Astronomy</td>
<td>4</td>
</tr>
</tbody>
</table>

Professional Education Core (see page 95 for recommended course sequence)

Professional Ed Core Credits 28

<table>
<thead>
<tr>
<th>Pre-Fall 2009/10 UMW Course</th>
<th>OCHE Equivalent Course</th>
<th>Professional Ed Core Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED 120 Becom/Prof Educator</td>
<td>EDU 201 Intro/Ed w/Fld Exper</td>
<td>4</td>
</tr>
<tr>
<td>ED 253 Psy Found Teach/Learn</td>
<td>EDU 222 Ed Psy/Child Devel</td>
<td>4</td>
</tr>
<tr>
<td>ED 328 Curr/Instruc/Assess/Mgt (3)</td>
<td>EDU 340 Classroom Mgt (4)</td>
<td>4</td>
</tr>
<tr>
<td>ED 329 Curr/Instruc/Assess/Mgt Prac (1)</td>
<td>EDU 382 Assess/Curr/Inst (4)</td>
<td>4</td>
</tr>
<tr>
<td>ED 425 Multictrlinky/Global Ed (3)</td>
<td>EDU 311 Ctrks/Dvrs/Ethics in Global Educ (4)</td>
<td>4</td>
</tr>
<tr>
<td>ED 426 Multictrlinky/Global Ed Prac (1)</td>
<td>EDU 497 Meth: 5-12 Science</td>
<td>4</td>
</tr>
<tr>
<td>Select 1 from the following:</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>HIP 241 Pers/Comm Health (4)</td>
<td>TBD</td>
<td>TBD</td>
</tr>
<tr>
<td>HIP 245 Human Sexuality (4)</td>
<td>TBD</td>
<td>TBD</td>
</tr>
</tbody>
</table>

*Students are strongly encouraged to take ANTH 105 as an elective prior to enrolling in ED 425/426 (EDU 311).

A recent certificate of first aid & safety (excluding child & adult CPR and AED, & infant CPR) is required of all education majors prior to student teaching. HIP 241 is recommended to fulfill this requirement.

Electives

Elective Credits 0-1

<table>
<thead>
<tr>
<th>Pre-Fall 2009/10 UMW Course</th>
<th>OCHE Equivalent Course</th>
<th>Elective Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED 473 Stu Teaching-Secondary</td>
<td>EDU 405 Stu Tchg: 5-12</td>
<td>8</td>
</tr>
<tr>
<td>Select from any catalog courses</td>
<td></td>
<td>0-1</td>
</tr>
</tbody>
</table>

Student Teaching (concurrent enrollment in same semester)

Student Teaching Credits 12

<table>
<thead>
<tr>
<th>Pre-Fall 2009/10 UMW Course</th>
<th>OCHE Equivalent Course</th>
<th>Student Teaching Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED 473 Stu Teaching-Secondary</td>
<td>EDU 405 Stu Tchg: 5-12</td>
<td>8</td>
</tr>
<tr>
<td>Select from any catalog courses</td>
<td></td>
<td>0-1</td>
</tr>
</tbody>
</table>

TOTAL CREDITS REQUIRED 128
BS: Secondary Education
History Major

Refer to pages 85-89 for information on applying for admission to the Teacher Education Program and for information regarding program requirements. The Education Department strongly recommends that candidates seek licensure in more than one subject area (by combining one teaching major with at least one teaching minor or additional major) to increase their hiring options. We recommend that History Majors also complete the Social Science Major. A Coaching Option is also available with any teaching major, but does not lead to licensure.

**General Education (page 42)**

<table>
<thead>
<tr>
<th>Pre-Fall 2009/10 UMW Course</th>
<th>OCHE Equivalent Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 101 European Civ I</td>
<td>VSTRT 101 West Civ I</td>
</tr>
<tr>
<td>HIST 102 European Civ II</td>
<td>VSTRT 102 West Civ II</td>
</tr>
<tr>
<td>HIST 111 Amer Hist to Civil War</td>
<td>VSTA 101 Amer Hist I</td>
</tr>
<tr>
<td>HIST 112 Amer Hist/Reconsrt</td>
<td>VSTA 102 Amer Hist II</td>
</tr>
<tr>
<td>HIST 371 MT/American West</td>
<td>VSTA 355 MT/American West</td>
</tr>
</tbody>
</table>

Select 1 from the following:

| ANTH/HIST/POLS/SOC 221 Quant Meth/ Soc Sci (4) | SSS 221 Quant Rsrch Meth/Soc Sci (4) |
| PSY 221 Quant Meth/Soc Sci (4) | SYX 203 Intro/Soc Sci Rsrch Meth (4) |

Select 1 from the following:

| HIST 225 Africa/Middle East (4) | VSTR 260 Africa/Mid East (4) |
| HIST 240 History/Far East (4)  | VSTR 255 Hist/Far East (4)  |
| HIST 274 World Hist (4)        | VSTR 274 World Hist (4)     |

Select 1 from the following:

| HIST 452 Europ Intell Hist (4) | VSTR 423 Europ Intell Hist (4) |
| HIST 456 US Cultural Hist (4)  | VSTR 412 Amer Thought/Clt (4)  |

Select 2 from the following:

| HIST 320 Hist/Central Europe I (4) | VSTR 310 Hist/Cnt Europe I (4) |
| HIST 321 Hist/Central Europe II (4) | VSTR 311 Hist/Cnt Europe II (4) |
| HIST 325 Hist/Mass Media (4)      | VSTA 331 Hist/Mass Media (4)  |
| HIST 360 Cold War Europe (4)     | VSTR 360 Cold War Europe (4)  |
| HIST 362 Afric-Amer Hist (4)     | VSTA 341 Afric-Amer Hist (4)  |
| HIST 370 Women’s Hist (4)        | VSTA 386 Women’s Hist (4)     |
| HIST 380 Modern Europe (4)       | VSTR 326 Champ Europe (4)     |
| HIST 409 Seminar (4)             | VSTA 494 Sem/Wkshop (4) or   |
| HIST 452 Europ Intell Hist (4)   | VSTR 423 Europ Intell Hist (4) |
| HIST 456 US Cultural Hist (4)    | VSTA 412 Amer Thought/Clt (4)  |
| POLS 313 Int Rel/Amer Diplom (4) | PSCI 331 Intnl Rel Theory (4) |
| POLS 321 Comparative Politics (4) | VSTA 321 Comp Politcs (4)   |
| POLS 341 Political Economy (4)   | VSTA 341 Political Econ (4)   |

**Professional Education Core (see page 95 for recommended course sequence)**

<table>
<thead>
<tr>
<th>ED 120 Becon/Prof Educator</th>
<th>EDU 201 Intro/Ed w/Fld Exper</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED 253 Psy Found Teach/Learn</td>
<td>EDU 222 Ed Psy/Child Devel</td>
</tr>
<tr>
<td>ED 328 Curr/Instr/Aess/Mgt Prac (1)</td>
<td>EDU 340 Classroom Mgt (4)</td>
</tr>
<tr>
<td>ED 329 Curr/Instr/Aess/Mgt Prac (1)</td>
<td>EDU 382 Assess/Curr/Instr (4)</td>
</tr>
<tr>
<td>ED 423 Mitc/Global Ed (3)</td>
<td>EDU 311 Cult/Divers/Ethics in Global Educ/4</td>
</tr>
<tr>
<td>ED 426 Mitc/Global Ed Prac (1)</td>
<td>EDU 481 Content Area Lrncy</td>
</tr>
<tr>
<td>ED 445 Meth/Tchg Cont Area Lrncy</td>
<td>EDU 497 Meth: 5-12 Soc Studies</td>
</tr>
<tr>
<td>HIP 241 Personal/Comm Health (4)</td>
<td>TBD</td>
</tr>
<tr>
<td>HIP 245 Human Sexuality (4)</td>
<td>TBD</td>
</tr>
</tbody>
</table>

Students are strongly encouraged to take ANTH 105 as an elective prior to enrolling in EDU 425/426 (EDU 311). A recent certificate of first aid & safety (including child & adult CPR and AED, & infant CPR) is required of all education majors prior to student teaching. HIP 231 is recommended to fulfill this requirement.

| HIP 241 Personal/Comm Health (4) | TBD |
| HIP 245 Human Sexuality (4) | TBD |

**Electives**

Elective Credits 14-15

**Student Teaching (concurrent enrollment in same semester)**

<table>
<thead>
<tr>
<th>ED 473 Stu Teaching-Secondary</th>
<th>EDU 495 Stu Tchg: 5-12</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED 306 Schl Law/Advoc/All K-12 Lrnrs</td>
<td>TBD</td>
</tr>
</tbody>
</table>

| TOTAL CREDITS REQUIRED | 128 |

The University of Montana Western Catalog 2010-2011
BS: Secondary Education
Industrial Technology Major

IT courses are only available at the Helena College of Technology (COT).
For information, contact Kevin Brockbank at Helena COT (406-444-6775), or Gary Frey (g_frey@umwestern.edu).

Refer to pages 85-89 for information on applying for admission to the Teacher Education Program and for information regarding program requirements. The Education Department strongly recommends that candidates seek licensure in more than one subject area (by combining one teaching major with at least one teaching minor or additional major) to increase their hiring options.

General Education (page 42) General Education Credits 31-32

<table>
<thead>
<tr>
<th>Pre-Fall 2009/10 UMW Course</th>
<th>OCHE Equivalent Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 101 Intro/Chemistry</td>
<td>CHMY 121 Intro/Gen Chem</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 101 Intro/Physics</td>
<td>PHSX 103 Our Physical World</td>
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</tbody>
</table>

Information & Technology Exam Requirement: If student does not pass the UMW Information & Technology Exam upon entrance to UMW, student will take COMS 115 Computer Basics for Educators (4) to assist in passing the exam. The exam must be passed prior to admission to the Teacher Education Program (TEP).

Industrial Technology Major Core Major Credits 42

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
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<tbody>
<tr>
<td>COMS 210</td>
<td>Comp Hrdwr/Sftwr Mgt</td>
<td>4</td>
</tr>
<tr>
<td>IT 120</td>
<td>Power/Energy/Transport Fund</td>
<td>4</td>
</tr>
<tr>
<td>IT 130</td>
<td>Graphic Communication</td>
<td>3</td>
</tr>
<tr>
<td>IT 135</td>
<td>Computer-Aided Drafting</td>
<td>4</td>
</tr>
<tr>
<td>IT 140</td>
<td>Metal Materials &amp; Processes</td>
<td>4</td>
</tr>
<tr>
<td>IT 141</td>
<td>Plastics</td>
<td>1</td>
</tr>
<tr>
<td>IT 220</td>
<td>Appl Electric/Electronics</td>
<td>3</td>
</tr>
<tr>
<td>IT 240</td>
<td>Wood/Synthet Prod Syst</td>
<td>3</td>
</tr>
<tr>
<td>IT 241</td>
<td>Machining</td>
<td>3</td>
</tr>
<tr>
<td>IT 311</td>
<td>Technology Lab Mgt</td>
<td>2</td>
</tr>
<tr>
<td>IT 345</td>
<td>Comp-Aided Manufact</td>
<td>4</td>
</tr>
<tr>
<td>IT 350</td>
<td>Struc Analysis/Const Technl</td>
<td>4</td>
</tr>
<tr>
<td>IT 440</td>
<td>Mass Production</td>
<td>3</td>
</tr>
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</table>

Professional Education Core (see page 95 for recommended course sequence) Professional Ed Core Credits 30

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED 120</td>
<td>Becom/Prof Educator</td>
<td>4</td>
</tr>
<tr>
<td>ED 253</td>
<td>Psy Found Teach/Learn</td>
<td>4</td>
</tr>
<tr>
<td>ED 328</td>
<td>Curr/Instr/Assess/Mgt (3)</td>
<td>4</td>
</tr>
<tr>
<td>ED 329</td>
<td>Curr/Instr/Assess/Mgt Prac (1)</td>
<td>1</td>
</tr>
<tr>
<td>ED 425</td>
<td>Mlticltrl/Global Ed’ (3)</td>
<td>4</td>
</tr>
<tr>
<td>ED 426</td>
<td>Mlticltrl/Global Ed Prac’ (1)</td>
<td>1</td>
</tr>
<tr>
<td>ED 445</td>
<td>Meth/Tchg Cont Area Litrcy</td>
<td>2</td>
</tr>
<tr>
<td>FT 351</td>
<td>Meth/Mat/Indust Technol</td>
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</table>

Select 1 from the following: 4

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIP 241</td>
<td>Pers/Comm Health</td>
<td>4</td>
</tr>
<tr>
<td>HIP 245</td>
<td>Human Sexuality</td>
<td>4</td>
</tr>
</tbody>
</table>

Students are strongly encouraged to take ANTH 105 as an elective prior to enrolling in ED 425/426 (EDU 311).
A recent certificate of first aid & safety (including child & adult CPR and AED, & infant CPR) is required of all education majors prior to student teaching. HIP 231 is recommended to fulfill this requirement.

Electives Elective Credits 12-13

Select from any catalog courses 12-13

Student Teaching (concurrent enrollment in same semester) Student Teaching Credits 12

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED 473</td>
<td>Stu Teaching-Secondary</td>
<td>8</td>
</tr>
<tr>
<td>---</td>
<td>EDU 495 Stu Tchg: 5-12</td>
<td>4</td>
</tr>
<tr>
<td>---</td>
<td>EDU 306 Schl Law/Advoc/All K-12 Lrnrs</td>
<td>4</td>
</tr>
</tbody>
</table>

TOTAL CREDITS REQUIRED 128
**BS: Secondary Education Mathematics Major**

Refer to pages 85-89 for information on applying for admission to the Teacher Education Program and for information regarding program requirements. The Education Department strongly recommends that candidates seek licensure in more than one subject area (by combining one teaching major with at least one teaching minor or additional major) to increase their hiring options. A Coaching Option is also available with any teaching major, but does not lead to licensure.

**General Education (page 42)**

| Pre-Fall 2009/10 UMW Course | OCHE Equivalent Course | General Education Credits | 31-32 |
|-----------------------------|------------------------|--------------------------|
| MATH 131 Probability        | STAT 121 Probability   | 4                        |
| PHYS 233 General Physics    | PHYSX 220 Physics I    | 4                        |

**Information & Technology Exam Requirement:** If student does not pass the UMW Information & Technology Exam upon entrance to UMW, student will take COMS 115 Computer Basics for Educators (4) to assist in passing the exam. The exam must be passed prior to admission to the Teacher Education Program (TEP).

**Mathematics Major Core**

<table>
<thead>
<tr>
<th>Course</th>
<th>Equivalent Course</th>
<th>Major Credits</th>
<th>47-48</th>
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</thead>
<tbody>
<tr>
<td>MATH 201 Calculus I</td>
<td>M 171 Calculus I</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>MATH 202 Calculus II</td>
<td>M 172 Calculus II</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>MATH 203 Calculus III</td>
<td>M 273 Multivar Calculus</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>MATH 260 Linear Algebra</td>
<td>M 221 Intro/Linear Algebra</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>MATH 311 Ord Diff Equations</td>
<td>M 274 Intro/Diff Equations</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>MATH 341 College Geometry</td>
<td>M 329 Modern Geometry</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>MATH 343 Found/Math</td>
<td>M 343 Found/Math</td>
<td>4</td>
<td></td>
</tr>
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</table>

Select 1 from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Major Credits</th>
<th>4</th>
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</thead>
<tbody>
<tr>
<td>COMS 111 Program Fund (3)</td>
<td>TBD</td>
<td></td>
</tr>
<tr>
<td>MATH 210 Computer Math (4)</td>
<td>M 210 Computer Math (4)</td>
<td></td>
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</tbody>
</table>

Select 1 from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Major Credits</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 232 Statistics (4)</td>
<td>STAT 217 Int Stats Concepts (4)</td>
<td></td>
</tr>
<tr>
<td>MATH 333 Math Stats (4)</td>
<td>STAT 422 Math Stats (4)</td>
<td></td>
</tr>
</tbody>
</table>

Select 1 from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Major Credits</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 401 Determinant Modelling (4)</td>
<td>M 414 Determinant Models (4)</td>
<td></td>
</tr>
<tr>
<td>MATH 433 Stochastic Modelling (4)</td>
<td>STAT 433 Stochastic Modelling (4)</td>
<td></td>
</tr>
</tbody>
</table>

Select 2 from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Major Credits</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 441 Advanced Calculus (4)</td>
<td>M 435 Advanced Calculus I (4)</td>
<td></td>
</tr>
<tr>
<td>MATH 442 Complex Variables (4)</td>
<td>M 472 Intro/Complex Analysis (4)</td>
<td></td>
</tr>
<tr>
<td>MATH 443 Abstract Algebra (4)</td>
<td>M 431 Abstract Algebra I (4)</td>
<td></td>
</tr>
<tr>
<td>MATH 444 Advanced Theory (4)</td>
<td>M 444 Advanced Theory (4)</td>
<td></td>
</tr>
</tbody>
</table>

**Professional Education Core**

(see page 95 for recommended course sequence)

<table>
<thead>
<tr>
<th>Course</th>
<th>Major Credits</th>
<th>30</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED 120 Becoming/Prof Educator</td>
<td>EDU 201 Intro/Ed w/Field Exp</td>
<td></td>
</tr>
<tr>
<td>ED 253 Psy Found Teach/Learn</td>
<td>EDU 222 Ed Psych/Child Develop</td>
<td></td>
</tr>
<tr>
<td>ED 328 Curr/Instr/Assess/Mgmt (3)</td>
<td>EDU 340 Classroom Mgmt (4)</td>
<td></td>
</tr>
<tr>
<td>ED 329 Curr/Inst/Assess/Mgmt Pract (1)</td>
<td>EDU 382 Assess/Curr/Instr (4)</td>
<td></td>
</tr>
<tr>
<td>ED 425 Mitochondr/Glob Ed 1</td>
<td>EDU 311 Cult/Divers/Ethics in Global Educ (4)</td>
<td></td>
</tr>
<tr>
<td>ED 426 Mitochondr/Glob Ed Pract 1</td>
<td>EDU 311 Cult/Divers/Ethics in Global Educ (4)</td>
<td></td>
</tr>
<tr>
<td>ED 445 Meth/Teach Cont Area Litrcy</td>
<td>EDU 481 Content Area Litrcy</td>
<td></td>
</tr>
<tr>
<td>M 341 Meth/Math/Teach</td>
<td>EDU 497 Meth/5-12 Math</td>
<td></td>
</tr>
</tbody>
</table>

Select 1 from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Major Credits</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>HHP 241 Pers/Comm Health (4)</td>
<td>TBD</td>
<td></td>
</tr>
</tbody>
</table>

**Electives**

- Select from any catalog courses | **Elective Credits** | 6-8 |

**Student Teaching (concurrent enrollment in same semester)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Major Credits</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED 473 Stu Teaching-Secondary</td>
<td>EDU 495 Stu Teaching 5-12</td>
<td></td>
</tr>
<tr>
<td>HHP 231 Pers/Comm Health (4)</td>
<td>TBD</td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL CREDITS REQUIRED** | 128 |

---

*A recent certificate of first aid & safety (including child & adult CPR and AED, & infant CPR) is required of all education majors prior to student teaching. HHP 231 is recommended to fulfill this requirement.*
BS: Secondary Education
Music K-12 Major

Refer to pages 85-89 for information on applying for admission to the Teacher Education Program and for information regarding program requirements. The Education Department strongly recommends that candidates seek licensure in more than one subject area (by combining one teaching major with at least one teaching minor or additional major) to increase their hiring options. A Coaching Option is also available with any teaching major, but does not lead to licensure.

General Education (page 42)

Information & Technology Exam Requirement: If student does not pass the UMW Information & Technology Exam upon entrance to UMW, student will take COMS 115 Computer Basics for Educators (4) to assist in passing the exam. The exam must be passed prior to admission to the Teacher Education Program (TEP).

General Education Credits 31-32

Music K-12 Major Core

<table>
<thead>
<tr>
<th>Pre-Fall 2010 UMW Course</th>
<th>OCHE Equivalent Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED 379 Music for Elem Teachers</td>
<td>EDU 397 Meth: K-8 Music</td>
</tr>
<tr>
<td>MUS 131 Music Theory I (2)</td>
<td>MUS107 Mus Thry IAural Percep (4)</td>
</tr>
<tr>
<td>MUS 141 Appl Musicianship I (2)</td>
<td></td>
</tr>
<tr>
<td>MUS 132 Music Theory II (2)</td>
<td>MUS109 Mus Thry II/Aural Percep (4)</td>
</tr>
<tr>
<td>MUS 142 Appl Musicianship II (2)</td>
<td></td>
</tr>
<tr>
<td>MUS 162 Voice in Class</td>
<td>MUS 152 Voice in Class</td>
</tr>
<tr>
<td>MUS 202 Intro/Music Lit</td>
<td>MUS 202 Intro/Music Lit</td>
</tr>
<tr>
<td>MUS 209 String Methods</td>
<td>TBD</td>
</tr>
<tr>
<td>MUS 212 Woodwind Methods</td>
<td>MUSE 133 Techniq: Woodwinds</td>
</tr>
<tr>
<td>MUS 213 Brass Methods</td>
<td>TBD</td>
</tr>
<tr>
<td>MUS 214 Percussion Methods</td>
<td>MUSE 134 Techniq: Percussion</td>
</tr>
<tr>
<td>MUS 233 Mus Theory/Ea Train III</td>
<td>TBD</td>
</tr>
<tr>
<td>MUS 372 Conducting</td>
<td>TBD</td>
</tr>
<tr>
<td>MUS 374 Arranging</td>
<td>TBD</td>
</tr>
<tr>
<td>MUS 461 Music History</td>
<td>TBD</td>
</tr>
<tr>
<td>Select 4 credits from Lessons:</td>
<td></td>
</tr>
<tr>
<td>MUS 114 Orchestral Instruments (1)</td>
<td>TBD</td>
</tr>
<tr>
<td>MUS 153 Piano (V 1-2)</td>
<td>MUS 195 Appld Music I (V 1-2)</td>
</tr>
<tr>
<td>MUS 163 Voice (V 1-2)</td>
<td>MUS 150 Beg Voice (V 1-2)</td>
</tr>
<tr>
<td>MUS 187 Performance Seminar (1)</td>
<td>MUS 187 Perform Study (1)</td>
</tr>
<tr>
<td>MUS 314 Orchestral Instruments (1-2)</td>
<td>TBD</td>
</tr>
<tr>
<td>MUS 353 Piano (V 1-2)</td>
<td>MUS 395 Appld Mus III (V 1-2)</td>
</tr>
<tr>
<td>MUS 363 Voice (V 1-2)</td>
<td>MUS 363 Voice (V 1-2)</td>
</tr>
<tr>
<td>MUS 387 Performance Seminar (1)</td>
<td>MUS 387 Perform Study (1)</td>
</tr>
<tr>
<td>Select 4 credits from Ensembles:</td>
<td></td>
</tr>
<tr>
<td>MUS 113 Instr Ensemble (1)</td>
<td>TBD</td>
</tr>
<tr>
<td>MUS 116 Concert Band (1)</td>
<td>MUS 114 Band: UMW Cnct Bnd (1)</td>
</tr>
<tr>
<td>MUS 117 Jazz Ensemble (1)</td>
<td>MUS 131 Jazz Ens I: UMW (1)</td>
</tr>
<tr>
<td>MUS 165 Voc Ensemble (1)</td>
<td>MUS 147 Choral Ens: UMW (1)</td>
</tr>
<tr>
<td>MUS 313 Instr Ensemble (1)</td>
<td>TBD</td>
</tr>
<tr>
<td>MUS 316 Concert Band (1)</td>
<td>MUS 314 Band III: UMW Cnct Band (1)</td>
</tr>
<tr>
<td>MUS 317 Jazz Ensemble (1)</td>
<td>MUS 331 Jazz Ens II: UMW (1)</td>
</tr>
<tr>
<td>MUS 365 Voc Ensemble (1)</td>
<td>MUS 312 Choir III: UMW (1)</td>
</tr>
<tr>
<td>Select 1 from the following:</td>
<td></td>
</tr>
<tr>
<td>HHP 241 Pers/Comm Health (4)</td>
<td>TBD</td>
</tr>
<tr>
<td>HHP 245 Human Sexuality (4)</td>
<td>TBD</td>
</tr>
<tr>
<td>Students are strongly encouraged to take ANTH 105 as an elective prior to enrolling in ED 425/426 (EDU 311).</td>
<td></td>
</tr>
</tbody>
</table>

A recent certificate of first aid & safety (including child & adult CPR and AED, & infant CPR) is required of all education majors prior to student teaching. HHP 231 is recommended to fulfill this requirement.

Professional Education Core (see page 95 for recommended course sequence)

| Professional Ed Core Credits | 30 |

| ED 120 Becom/Prof Educator | EDU 201 Intro/Ed w/Fld Exp |
| ED 253 Psy Found Teach/Learn | EDU 222 Ed Psy/Child Dev |
| ED 328 Curr/Instrc/Assess/Mgt (3) | EDU 340 Classroom Mgt (4) |
| ED 329 Curr/Instrc/Assess/Mgt Prac (1) | EDU 382 Assess/Inst/Instr (4) |
| ED 425 Mlticltrl/Global Ed' (3) | EDU 311 Cultl/Divers/Ethics Gbl Edu |
| ED 426 Mlticltrl/Global Ed Prac' (1) | EDU 311 Cultl/Divers/Ethics Gbl Edu |
| ED 445 Meth/Tchg Cont Area Litrcy | EDU 481 Content Area Litrcy |
| MUS 351 Meth/Mat in Music (3) | MUSE 497 Methods: Sec Music Prac |
| MUS 378 Sec Schl Music Tching Prac (1) |  |

Select 1 from the following: 4

Electives

| Elective Credits | 8-9 |

| Select from any catalog courses |  |

Student Teaching (concurrent enrollment in same semester)

| Student Teaching Credits | 12 |

<table>
<thead>
<tr>
<th>ED 474 Stu Teaching K-12</th>
<th>EDU 495 Stu Tchg. K-12</th>
</tr>
</thead>
<tbody>
<tr>
<td>---</td>
<td>EDU 316 Schl Law/Advoc/All K-12 Lrnrs</td>
</tr>
</tbody>
</table>

TOTAL CREDITS REQUIRED 128
BS: Secondary Education
Physical Education & Health K-12 Major

Refer to pages 85-89 for information on applying for admission to the Teacher Education Program and for information regarding program requirements. The Education Department strongly recommends that candidates seek licensure in more than one subject area (by combining one teaching major with at least one teaching minor or additional major) to increase their hiring options. The Physical Education & Health K-12 major prepares candidates for two licensure fields. A Coaching Option is also available with any teaching major, but does not lead to licensure (page 115).

General Education (page 42)                                             General Education Credits 31-32

Information & Technology Exam Requirement: If student does not pass the UMW Information & Technology Exam upon entrance to UMW, student will take COMS 115 Computer Basics for Educators (4) to assist in passing the exam. The exam must be passed prior to admission to the Teacher Education Program (TEP).

Physical Education & Health K-12 Major Core                                Major Credits 50

<table>
<thead>
<tr>
<th>Pre-Fall 2010 UMW Course</th>
<th>OCHE Equivalent Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>HHP 143 Found/Health/PE</td>
<td>TBD</td>
</tr>
<tr>
<td>4</td>
<td></td>
</tr>
<tr>
<td>HHP 201 Team Sport Methods/Tech</td>
<td>TBD</td>
</tr>
<tr>
<td>4</td>
<td></td>
</tr>
<tr>
<td>HHP 202 Indiv/Dual Sport Meth/Tech</td>
<td>TBD</td>
</tr>
<tr>
<td>4</td>
<td></td>
</tr>
<tr>
<td>HHP 205 Dance/Rhythm Meth/Tech I</td>
<td>DANC 285 Danc/Rhythm Meth/ Tech I</td>
</tr>
<tr>
<td>1</td>
<td></td>
</tr>
<tr>
<td>HHP 206 Dance/Rhythm Meth/Tech II</td>
<td>DANC 286 Danc/Rhythm Meth/ Tech II</td>
</tr>
<tr>
<td>1</td>
<td></td>
</tr>
<tr>
<td>HHP 241 Pers/Comm Health</td>
<td>TBD</td>
</tr>
<tr>
<td>4</td>
<td></td>
</tr>
<tr>
<td>HHP 245 Human Sexuality</td>
<td>TBD</td>
</tr>
<tr>
<td>4</td>
<td></td>
</tr>
<tr>
<td>HHP 315 Biomechanics</td>
<td>TBD</td>
</tr>
<tr>
<td>4</td>
<td></td>
</tr>
<tr>
<td>HHP 317 Exercise Physiology</td>
<td>TBD</td>
</tr>
<tr>
<td>4</td>
<td></td>
</tr>
<tr>
<td>HHP 319 Motor Learning/Psychol</td>
<td>TBD</td>
</tr>
<tr>
<td>4</td>
<td></td>
</tr>
<tr>
<td>HHP 347 Org/Admin/Health Enhanc</td>
<td>TBD</td>
</tr>
<tr>
<td>4</td>
<td></td>
</tr>
<tr>
<td>HHP 364 Nutrition</td>
<td>TBD</td>
</tr>
<tr>
<td>4</td>
<td></td>
</tr>
<tr>
<td>HHP 374 Elem School HPE/Pract</td>
<td>TBD</td>
</tr>
<tr>
<td>4</td>
<td></td>
</tr>
<tr>
<td>HHP 454 Adapted PE/Rec</td>
<td>TBD</td>
</tr>
<tr>
<td>4</td>
<td></td>
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</tbody>
</table>

Professional Education Core (see page 95 for recommended course sequence) Professional Ed Core Credits 26

<table>
<thead>
<tr>
<th>ED 120 Becom/Prof Educator</th>
<th>EDU 201 Intro/Ed w/Fld Exper</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>ED 253 Psy Found Teach/Learn</td>
<td>EDU 222 Ed Psy/Child Devel</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>ED 328 Curr/Instru/Assess/Mgt (3)</td>
<td>EDU 340 Classroom Mgt (4)</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>ED 329 Curr/Inst/Assess/Mgt Prac (1)</td>
<td>EDU 382 Assess/Instr (4)</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>ED 425 Mtchtrl/Global Ed1 (3)</td>
<td>EDU 311 Cultr/Divers/Ethics in Global Educ1(4)</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>ED 426 Mtchtrl/Global Ed Prac1 (1)</td>
<td>EDU 481 Content Area Ltrcy</td>
</tr>
<tr>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>HHP 351 Sec PE/Hlth Methods</td>
<td>TBD</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
</tr>
</tbody>
</table>

*Students are strongly encouraged to take ANTH 105 as an elective prior to enrolling in ED 425/426 (EDU 311).*

A recent certificate of first aid & safety (including child & adult CPR and AED, & infant CPR) is required of all education majors prior to student teaching. HHP 231 is recommended to fulfill this requirement.

Electives

| Elective Credits 8-9 |

Select from any catalog courses

Student Teaching (concurrent enrollment in same semester)

| Student Teaching Credits 12 |

ED 474 Stu Teaching K-12 | EDU 495 Stu Tchg K-12 |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>8</td>
</tr>
</tbody>
</table>

**TOTAL CREDITS REQUIRED 128**
# BS: Secondary Education
## Social Science Broadfield Major

Refer to pages 85-89 for information on applying for admission to the Teacher Education Program and for information regarding program requirements. The Education Department strongly recommends that candidates seek licensure in more than one subject area (by combining one teaching major with at least one teaching minor or additional major) to increase their hiring options. Social Science majors can easily add a History major or minor. A Coaching Option is also available with any teaching major, but does not lead to licensure.

### General Education (page 42)

<table>
<thead>
<tr>
<th>Course</th>
<th>OCEH Equivalent Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pre-Fall 2009/10 UMW Course</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH 131 Probability</td>
<td>STAT 121 Probability</td>
<td>4</td>
</tr>
<tr>
<td>PHIL 100 Intro/Philosophy</td>
<td>PHIL 101 Intro/Phil: Reason/Reality</td>
<td>4</td>
</tr>
<tr>
<td>Select 1 from the following:</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>GEOG 102 Human Geog (4)</td>
<td>GEOL 121 Human Geog (4)</td>
<td></td>
</tr>
<tr>
<td>GEOG 202 Reg Geog/No America (4)</td>
<td>GEOL 246 Geog/No America (4)</td>
<td></td>
</tr>
<tr>
<td>Select 1 from the following:</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>HIST 225 Africa/Middle East (4)</td>
<td>HIST 260 Africa/Middle East (4)</td>
<td></td>
</tr>
<tr>
<td>HIST 240 History/Far East (4)</td>
<td>HIST 255 History/Far East (4)</td>
<td></td>
</tr>
<tr>
<td>HIST 274 World History (4)</td>
<td>HIST 274 World History (4)</td>
<td></td>
</tr>
</tbody>
</table>

### Information & Technology Exam Requirement:
If student does not pass the UMW Information & Technology Exam upon entrance to UMW, student will take COMS 115 Computer Basics for Educators (4) to assist in passing the exam. The exam must be passed prior to admission to the Teacher Education Program (TEP).

### Social Science Broadfield Major Core

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select 1 from the following:</td>
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</tr>
<tr>
<td>ANTH/HIST/POLS/SOC 221 Quant Meth Soc Sci (4)</td>
<td>4</td>
</tr>
<tr>
<td>ANTH/HIST/POLS/PSY/SOC 222 Qual Meth/Soc Sci (4)</td>
<td>4</td>
</tr>
<tr>
<td>PSY 221 Quant Meth/Soc Sci (4)</td>
<td></td>
</tr>
<tr>
<td>ECON/GEO/POLS 201 World Econ</td>
<td>ECON 201 World Econ (4)</td>
</tr>
<tr>
<td>HIST 111 Amer Hist to Civil War</td>
<td>HIST 111 American Hist I (4)</td>
</tr>
<tr>
<td>HIST 112 Amer Hist/Reconstruct</td>
<td>HIST 102 American Hist II (4)</td>
</tr>
<tr>
<td>HIST 371 MT/Indian Sovereignty</td>
<td>HIST 371 MT/Indian Sovereignty</td>
</tr>
<tr>
<td>Select 1 from the following:</td>
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</tr>
<tr>
<td>HIST 452 Europ Intellec Hist (4)</td>
<td></td>
</tr>
<tr>
<td>HIST 456 US Cultural Hist (4)</td>
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</tr>
<tr>
<td>POLS 313 Int Rel/Amer Diplomacy (4)</td>
<td></td>
</tr>
<tr>
<td>POLS 321 Comparative Politics (4)</td>
<td></td>
</tr>
<tr>
<td>POLS 341 Political Economy (4)</td>
<td></td>
</tr>
<tr>
<td>POLS 409 Seminar (4)</td>
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</tr>
<tr>
<td>POLS 470 Constit Law (4)</td>
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</table>

### Professional Education Core (see page 95 for recommended course sequence)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select 1 from the following:</td>
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<tr>
<td>ED 120 Becom/Prof Educator</td>
<td>EDU 201 Intro/Ed w/Prof Exp</td>
</tr>
<tr>
<td>ED 253 Psy Found Teach/Learn</td>
<td>EDU 222 Ed Psy/Child Dev</td>
</tr>
<tr>
<td>ED 328 Curr/Instruc/Assess/Mgt (3)</td>
<td>EDU 340 Classroom Mgt (4)</td>
</tr>
<tr>
<td>ED 329 Curr/Instruc/Assess/Mgt Prac (1)</td>
<td>EDU 382 Assess/Curr/Instr (4)</td>
</tr>
<tr>
<td>ED 425 Mlnchnl/Global Ed (3)</td>
<td>EDU 311 Cultr/Divers/Ethics in Global Edu (4)</td>
</tr>
<tr>
<td>ED 426 Mlnchnl/Global Ed Pract (1)</td>
<td>EDU 481 Content Area Litry</td>
</tr>
<tr>
<td>ED 445 Meth/Tchg Cont Area Litrc</td>
<td>EDU 497 Meth: 5-12 Soc Stics</td>
</tr>
<tr>
<td>Select 1 from the following:</td>
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</tr>
<tr>
<td>HHP 231 is recommended to fulfill this requirement.</td>
<td></td>
</tr>
</tbody>
</table>

### Electives

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Select from any catalog courses</strong></td>
<td>2-3</td>
</tr>
</tbody>
</table>

### Student Teaching (concurrent enrollment in same semester)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED 473 Stu Teaching-Secondary</td>
<td>EDU 495 Stn Tchg: 5-12</td>
</tr>
<tr>
<td>---</td>
<td>EDU 306 Schl Law/Adv/Ass K-12 Lmrns</td>
</tr>
</tbody>
</table>

**TOTAL CREDITS REQUIRED** 128
BS: Secondary Education

Minor Areas

The following Minors, when combined with a teaching Major and successful completion of the requirements of the Teacher Education Program, lead to a recommendation for Secondary Education (grades 5-12) or K-12 Education licensure in the State of Montana. The Education Department strongly recommends that candidates seek licensure in more than one subject area (by combining at least one teaching Major with at least one teaching Minor) to increase their hiring options.

Note: not all states accept a Minor for licensure. Consult with the Director of Field Experiences for information on licensure requirements in other states.

Art K-12 Minor

<table>
<thead>
<tr>
<th>Pre-Fall 2009/10 UMW Course</th>
<th>OCHE Equivalent Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 140 Color &amp; Design</td>
<td>TBD</td>
</tr>
<tr>
<td>ART 141 Drawing</td>
<td>TBD</td>
</tr>
<tr>
<td>ART 211 Art History I</td>
<td>TBD</td>
</tr>
<tr>
<td>ART 212 Art History II</td>
<td>TBD</td>
</tr>
<tr>
<td>ART 271 Sculpture</td>
<td>TBD</td>
</tr>
<tr>
<td>ART 351 Meth/Mater of Art</td>
<td>TBD</td>
</tr>
</tbody>
</table>

In consultation with advisor, select one 3-D course and one 2-D course from the following:

ART 170 Intr/Photog [2-D] (4)  TBD
ART 225 Digil Media [2-D] (4)  TBD
ART 231 Ceramics [3-D] (4)  TBD
ART 243 Printmak [2-D] (4)  TBD
ART 247 Glass [3-D] (4)  TBD
ART 261 Waterclor [2-D] (4)  TBD
ART 267 Painting [2-D] (4)  TBD
ART 277 Fibers [3-D] (4)  TBD
One 300-level Art course  TBD

Total Credits 36

Biology Minor

General Education

<table>
<thead>
<tr>
<th>BIO 111 Biology I</th>
<th>BIOB 160 Prin/Living Syst</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 131 Probability</td>
<td>VSTAT 121 Probability</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BIO 112 Biology II</th>
<th>BIOB 170 Prin/Biol Diversity</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 255 Cell Biology</td>
<td>BIOB 260 Cell/Molec Biol</td>
</tr>
<tr>
<td>BIO 343 Genetics</td>
<td>BIOB 375 Gen Genetics</td>
</tr>
<tr>
<td>BIO 371 Hum Anat/Physiol</td>
<td>TBD</td>
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<tr>
<td>BIO 372 Hum Anat/Physiol</td>
<td>TBD</td>
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<tr>
<td>BIO 450 Evolution</td>
<td>BIOB 420 Evolution</td>
</tr>
<tr>
<td>BIO 477 Ecology</td>
<td>BIOE 370 Gen Ecology</td>
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<tr>
<td>CHEM 131 Gen Chem</td>
<td>CHMT 141 Coll Chem I</td>
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<tr>
<td>ED 355 Meth/Mat Exper Sci Ed</td>
<td>EDU 497 Meth: 5-12 Science</td>
</tr>
<tr>
<td>MATH 232 Statistics</td>
<td>VSTAT 217 Int Stats Cntrs</td>
</tr>
</tbody>
</table>

Total Credits 40

Business & Computer Applications Minor

General Education

<table>
<thead>
<tr>
<th>Pre-Fall 2009/10 UMW Course</th>
<th>OCHE Equivalent Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 230 Prin/Economics</td>
<td>ECNS 203 Prin/Micro/Macro</td>
</tr>
<tr>
<td>BUS 201 Small Bus Develop</td>
<td>TBD</td>
</tr>
<tr>
<td>BUS 217 Bus/Elec Comm</td>
<td>TBD</td>
</tr>
<tr>
<td>BUS 241 Financial Acctng</td>
<td>CTCG 201 Prin/Fin Acctng</td>
</tr>
<tr>
<td>COMS 101 Intro/Comp/Pres</td>
<td>CAPP 100 Shr Crs: Comp Lit</td>
</tr>
<tr>
<td>COMS 205 Bus Info Systems</td>
<td>TBD</td>
</tr>
<tr>
<td>COMS 210 Comp Hdw/Sftwr Mgt</td>
<td>TS 205 Comp Hdw/Sftwr Mgt</td>
</tr>
<tr>
<td>COMS 135 Microcomp Appl</td>
<td>CAPP 131 Basic MS Office</td>
</tr>
<tr>
<td>COMS 236 Adv Micro Appl</td>
<td>CAPP 251 Adv MS Office</td>
</tr>
<tr>
<td>COMS 212 Intro Web Design</td>
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<tr>
<td>Select 1 from the following:</td>
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<tr>
<td>BUS 325 Prin/Prac Mgt (3)</td>
<td>TBD</td>
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<tr>
<td>BUS 347 Prin/Prac Mrktng (3)</td>
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<tr>
<td>Methods Courses:</td>
<td></td>
</tr>
<tr>
<td>BUS 351 Meth/Mat Bus Theory</td>
<td>TBD</td>
</tr>
<tr>
<td>Subjects</td>
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<tr>
<td>COMS 351 Meth/Mat Comp Applications</td>
<td>TBD</td>
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<tr>
<td>COMS 335 Sftwr Mgr (4)</td>
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<td>Select 1 from the following:</td>
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<tr>
<td>BUS 280 Business Law (4)</td>
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<tr>
<td>BUS 304 Leadership (4)</td>
<td>TBD</td>
</tr>
<tr>
<td>COMS 111 Prog Fund (3)</td>
<td>TBD</td>
</tr>
<tr>
<td>COMS 235 Vid/Aud Design (4)</td>
<td>TBD</td>
</tr>
<tr>
<td>COMS 325 Dig Prnt Med (4)</td>
<td>TBD</td>
</tr>
<tr>
<td>COMS 355 Adv MS Office (4)</td>
<td>TBD</td>
</tr>
<tr>
<td>COMS 335 Adv MS Office (3)</td>
<td>TBD</td>
</tr>
<tr>
<td>COMS 306 Bus Inf Syst Lab (3)</td>
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</tbody>
</table>

Total Credits 42

Computer Science K-12 Minor

<table>
<thead>
<tr>
<th>COMS 111 Prog Fund</th>
<th>TBD</th>
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</thead>
<tbody>
<tr>
<td>COMS 210 Comp Hdw/ Sftwr Mgt</td>
<td>TS 205 Comp Hdw/Sftwr Mgt</td>
</tr>
<tr>
<td>COMS 215 Intro/C Progr</td>
<td>TBD</td>
</tr>
<tr>
<td>COMS 339 Database Mgt</td>
<td>TBD</td>
</tr>
<tr>
<td>COMS 351 Meth/Mat Comp Applications</td>
<td>TBD</td>
</tr>
<tr>
<td>COMS 387 Telecom</td>
<td>TBD</td>
</tr>
<tr>
<td>COMS 403 Syst Anlys/Design</td>
<td>TS 403 Syst Anlys/Design</td>
</tr>
<tr>
<td>Select 3 from the following:</td>
<td>11-12</td>
</tr>
<tr>
<td>COMS 176 Intro/Router Tech (CISCO II) (4)</td>
<td>TS 176 Intro/Router Tech (4)</td>
</tr>
<tr>
<td>COMS 226 Rout/Switching (CISCO III) (4)</td>
<td>TS 258 Rout/Switching (4)</td>
</tr>
<tr>
<td>COMS 245 Prog/Web App (3)</td>
<td>TBD</td>
</tr>
<tr>
<td>COMS 276 Network Design (CISCO IV) (4)</td>
<td>TS 270 Network Design (4)</td>
</tr>
<tr>
<td>MATH 103 Game Theory (4)</td>
<td>M 103 Game Theory</td>
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</tbody>
</table>

Total Credits 33-34
BS: Secondary Education

Minor Areas

Drama K-12 Minor

General Education

<table>
<thead>
<tr>
<th>Pre-Fall 2009/10 UMW Course</th>
<th>OCHE Equivalent Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>FA 101 Intro Visual/Perf Arts</td>
<td>TBD</td>
</tr>
<tr>
<td>DR 241 Play Prod/Intro/Direct</td>
<td>THTR 276 Play Prod/Intro/Dir</td>
</tr>
<tr>
<td>DR 243 Stagecraft/Costume</td>
<td>THTR 302 Stagef &amp; Light/ Costumes</td>
</tr>
<tr>
<td>DR 276 Acting Fund/Styles</td>
<td>THTR 120 Intro/Acting I</td>
</tr>
<tr>
<td>DR 351 Classroom Drama Meth</td>
<td>THTR 397 Meth: Drama/ K-12</td>
</tr>
<tr>
<td>DR/ENG 441 Drama Hist/Lit Genre</td>
<td>LIT 441 Drama Hist/Lit Genre</td>
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</table>

Select 1 from the following: 4 credits

<table>
<thead>
<tr>
<th>Pre-Fall 2009/10 UMW Course</th>
<th>OCHE Equivalent Course</th>
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<tbody>
<tr>
<td>DR 101 Drama Fundamentals (4)</td>
<td>TBD</td>
</tr>
<tr>
<td>DR 401 Creative Drama Methods (2)</td>
<td>TBD</td>
</tr>
<tr>
<td>DR/ENG 455 Shakespeare (4)</td>
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</tr>
<tr>
<td>ENG 453 Genre Seminar Drama (4)</td>
<td>LIT 473 Stds/Shakespeare (4)</td>
</tr>
<tr>
<td>ENG 494 Sem. Genre (4)</td>
<td>TBD</td>
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</table>

Select 4 credits from the following: 4

<table>
<thead>
<tr>
<th>Pre-Fall 2009/10 UMW Course</th>
<th>OCHE Equivalent Course</th>
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<tbody>
<tr>
<td>DR 217 Theatre Prac (V 1-2)</td>
<td>THTR 205 Thtr Wkshp II (V 1-2)</td>
</tr>
<tr>
<td>DR 346 Drama for Youth (2)</td>
<td>THTR 338 Drama/Youth (2)</td>
</tr>
<tr>
<td>DR/ENG 455 Shakespeare (4)</td>
<td>LIT 473 Stds/Shakespeare (4)</td>
</tr>
<tr>
<td>(if not taken above)</td>
<td>(if not taken above)</td>
</tr>
<tr>
<td>DR 460 Adv Directing (4)</td>
<td>THTR 479 Dir/Comm/Schls (4)</td>
</tr>
<tr>
<td>DR 466 Storytelling (2)</td>
<td>THTR 435 Storytelling (2)</td>
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<tr>
<td>FA 301 Contemp Arts Issues (4)</td>
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</table>

Total Credits 28-30

Earth Science Minor

General Education

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<tbody>
<tr>
<td>CHMY 141 Coll Chem I</td>
<td>CHEM 111 General Chemistry</td>
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<tr>
<td>GEOL 101 Intro to Geology (4)</td>
<td>GEO 101 Intro/Phys Geol (4)</td>
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<tr>
<td>GEOL 150 Enviro Geology (4)</td>
<td>GEO 103 Intro/Envirol Geol (4)</td>
</tr>
<tr>
<td>ED 355 Meth/Mat Exper Sci Ed</td>
<td>EDU 497 Meth: 3-12 Science</td>
</tr>
<tr>
<td>GEOL 226 Rocks/Min/Res</td>
<td>GEO 226 Rocks/Min/Res</td>
</tr>
<tr>
<td>GEOL 330 Structure/Teectonics</td>
<td>GEO 315 Struct Geol</td>
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<tr>
<td>GEOL 378 Surfical Process</td>
<td>GEO 378 Surfical Process</td>
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<tr>
<td>GEOL 432 Depositional Envs</td>
<td>GEO 309 Sedim/Stratigraphy</td>
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<td>PHYS 239 Phys Meteorol</td>
<td>PHYS 249 Phys Meteorol</td>
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<td>PHYS 240 Astronomy</td>
<td>ASTR 110 Intro/Astronomy</td>
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Total Credits 28

English Minor

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<tr>
<th>Pre-Fall 2009/10 UMW Course</th>
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<tr>
<td>ENG 264 Creativ Writing Wkshp</td>
<td>TBD</td>
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<tr>
<td>ENG 279 Fund/Literary Theory</td>
<td>LIT 300 Lit Criticism</td>
</tr>
<tr>
<td>ENG 280 Visions of America</td>
<td>LIT 218 Visions of America</td>
</tr>
<tr>
<td>ENG 330 Mythology</td>
<td>LIT 385 Mythology</td>
</tr>
<tr>
<td>ENG 413 Hist/Struc/Nature Lang</td>
<td>TBD</td>
</tr>
<tr>
<td>ENG/DR 455 Shakespeare</td>
<td>LIT 475 Studies/Shakespeare</td>
</tr>
<tr>
<td>ENG 352 Methods/Teach Compos</td>
<td>TBD</td>
</tr>
<tr>
<td>ENG 353 Methods/Teach Lit</td>
<td>TBD</td>
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</table>

Select 4 credits from the following: 4

<table>
<thead>
<tr>
<th>Pre-Fall 2009/10 UMW Course</th>
<th>OCHE Equivalent Course</th>
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</thead>
<tbody>
<tr>
<td>DR 241 Play Prod/Intro/Direct (4)</td>
<td>THTR 276 Play Prod/Intro/Dir (4)</td>
</tr>
<tr>
<td>ED 445 Meth/Tech Cont Area Ltrcy (2)</td>
<td>EDU 461 Cont Area Ltrcy (2)</td>
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<tr>
<td>ENG 215 Journalism (4)</td>
<td>TBD</td>
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<tr>
<td>ENG 216 Journalism (4)</td>
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<tr>
<td>ENG 301 Poetry Workshop (4)</td>
<td>TBD</td>
</tr>
<tr>
<td>ENG 302 Fiction Workshop (4)</td>
<td>TBD</td>
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<tr>
<td>ENG 303 Nonfiction Workshop (4)</td>
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<tr>
<td>ENG 320 Lit in Translation (4)</td>
<td>LIT 302 Lit in Translation (4)</td>
</tr>
<tr>
<td>ENG 339 Literary Regions (4)</td>
<td>LIT 339 Literary Regions (4)</td>
</tr>
<tr>
<td>ENG 360 Young Adult Lit (4)</td>
<td>LIT 382 Lit/Child/adoles (4)</td>
</tr>
<tr>
<td>ENG 361 Poetry &amp; Thought (4)</td>
<td>LIT 361 Poetry &amp; Thought (4)</td>
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<tr>
<td>ENG 362 Sem/Women’s Lit (4)</td>
<td>LIT 335 Women &amp; Lit (4)</td>
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<tr>
<td>ENG/DR 441 Drama Hist/Lit Genre (4)</td>
<td>LIT 441 Drama Hist/Lit Genre (4)</td>
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<tr>
<td>ENG 452 Sem/Literary Period (4)</td>
<td>LIT 494 Sem: Lit Period (4)</td>
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<tr>
<td>ENG 453 Genre Seminar (4)</td>
<td>LIT 494 Sem: Genre (4)</td>
</tr>
<tr>
<td>ENG 454 Authors Seminar (4)</td>
<td>LIT 494 Sem: Authors (4)</td>
</tr>
<tr>
<td>ENG 479 Seminar/Lit Theory (4)</td>
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</table>

Total Credits 36

Health & Human Performance K-12 Minor

<table>
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<tr>
<th>Pre-Fall 2009/10 UMW Course</th>
<th>OCHE Equivalent Course</th>
</tr>
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<tbody>
<tr>
<td>HHP 143 Found/Health/PE</td>
<td>TBD</td>
</tr>
<tr>
<td>HHP 201 Team Sport Meth/Techniq</td>
<td>TBD</td>
</tr>
<tr>
<td>HHP 202 Indiv/Dual Sport Meth</td>
<td>TBD</td>
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<tr>
<td>HHP 205 Dncc/Rhythm Meth/Tech I</td>
<td>DANC 285 Dnc/Rhythm Meth/ Tech I</td>
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<tr>
<td>HHP 206 Dncc/Rhythm Meth/Tech II</td>
<td>DANC 285 Dnc/Rhythm Meth/ Tech II</td>
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<tr>
<td>HHP 241 Pers/Community Health</td>
<td>TBD</td>
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<tr>
<td>HHP 315 Biomechanics</td>
<td>TBD</td>
</tr>
<tr>
<td>HHP 317 Exercise Physiology</td>
<td>TBD</td>
</tr>
<tr>
<td>HHP 319 Motor Lrning/Msychol</td>
<td>TBD</td>
</tr>
<tr>
<td>HHP 351 Sec PE/Health Methods</td>
<td>TBD</td>
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<tr>
<td>HHP 374 Elem School HPE/Pract</td>
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</table>

Total Credits 38

The University of Montana Western Catalog 2010-2011
History Minor

<table>
<thead>
<tr>
<th>Pre-Fall 2009/10 UMW Course</th>
<th>OCEH Equivalent Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED 357 Meth/Mat/Soc Sci</td>
<td>EDC 497 Meth: 5-12 Soc Studies</td>
</tr>
<tr>
<td>HIST 371 MT/Amer West</td>
<td>HIST 355 MT/Amer West</td>
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</table>

Select 1 from the following: 4 credits

| HIST 221 Quant Meth/Soc Sci (4) | ESS 221 Quant Meth/Soc Sci (4) |
| HIST 222 Qual Meth/Soc Sci (4) | ESS 222 Qual Meth/Soc Sci (4) |

Select 1 from the following: 4 credits

| HIST 101 European Civ I (4) | HIST 101 West Civ I (4) |
| HIST 102 European Civ II (4) | HIST 102 West Civ II (4) |

Select 1 from the following: 4 credits

| HIST 111 Amer Hist/Civil War (4) | HIST 101 Amer Hist I (4) |
| HIST 112 Amer Hist/Recon (4) | HIST 102 Amer Hist II (4) |

Select 2 from the following: 8 credits

| HIST 320 Hist/Cent Europe I (4) | HIST 310 Hist/Cent Eur I (4) |
| HIST 321 Hist/Cent Europe II (4) | HIST 311 Hist/Cent Eur II (4) |
| HIST 325 Hist/Mass Media (4) | HIST 311 Hist/Mass Media (4) |
| HIST 360 Cold War Europe (4) | HIST 360 Cold War Eur (4) |
| HIST 362 African-Amer Hist (4) | HIST 341 Afric-Amer Hist (4) |
| HIST 370 Women’s History (4) | HIST 356 Women’s Hist (4) |
| HIST 380 Modern Europe (4) | HIST 326 Contemp Eur (4) |
| HIST 409 Seminar (4) | HIST/STR 494 Sem/Wk (4) |
| HIST 452 Europ Intellec Hist (4) | HIST 423 Eur Intel Hist (4) |
| HIST 456 US Culti Hist (4) | HIST 412 Amer The/Cbr (4) |
| POLS 313 Intlani/Re/Amer Diplom (4) | POLS 313 Intlani Rel/Thy (4) |
| POLS 321 Comparative Politics (4) | POLS 321 Compar Polit (4) |
| POLS 341 Political Economy (4) | POLS 341 Polit Econ (4) |

Total Credits 36

Industrial Technology Minor

Pre-Fall 2009/10 UMW Course | OCEH Equivalent Course |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>T 120 Power/Energy/Transport Fund</td>
<td>TBD</td>
</tr>
<tr>
<td>T 130 Graphic Communication</td>
<td>TBD</td>
</tr>
<tr>
<td>T 135 Computer-Aided Drafting</td>
<td>TBD</td>
</tr>
<tr>
<td>T 140 Metal Materials &amp; Processes</td>
<td>TBD</td>
</tr>
<tr>
<td>T 220 Applied Electronics/Electronics</td>
<td>TBD</td>
</tr>
<tr>
<td>T 240 Wood/Synthetic Product Syst</td>
<td>TBD</td>
</tr>
<tr>
<td>T 241 Machining</td>
<td>TBD</td>
</tr>
<tr>
<td>T 351 Meth/Mat Industrial Technol</td>
<td>TBD</td>
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</tbody>
</table>

Total Credits 28

Library Media K-12 Minor

<table>
<thead>
<tr>
<th>Pre-Fall 2009/10 UMW Course</th>
<th>OCEH Equivalent Course</th>
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</thead>
<tbody>
<tr>
<td>LIB 461 Info Literacy/Curric</td>
<td>TBD</td>
</tr>
<tr>
<td>LIB 464 Reference Resources</td>
<td>TBD</td>
</tr>
<tr>
<td>C.JI 480 Collect Devel/Curric</td>
<td>TBD</td>
</tr>
<tr>
<td>C.JI 483 Libr Media Techn Proc</td>
<td>TBD</td>
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<tr>
<td>C.JI 484 Adv Assess/Libr Media</td>
<td>TBD</td>
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<tr>
<td>C.JI 488 Library &amp; Technol</td>
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<tr>
<td>C.JI 485 Libr Media Practicum</td>
<td>TBD</td>
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<tr>
<td>LIB 469 Libr Media Practicum</td>
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Total Credits 25

**Note:** Development of a Literacy Education Portfolio and exit interview with the Literacy Program Coordinator following student teaching is required.

**Literacy K-12 Minor**

<table>
<thead>
<tr>
<th>Pre-Fall 2009/10 UMW Course</th>
<th>OCEH Equivalent Course</th>
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<tbody>
<tr>
<td>ED 270 Literacy/Lang/Texts</td>
<td>EDC 235 Literacy/Lang/Texts</td>
</tr>
<tr>
<td>ED 370 Teach Lang Arts/Read</td>
<td>EDC 397 Meth: K-8 Lang Arts/Soc Scl/Soc/Lrls</td>
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<tr>
<td>ED 381 Intro Literacy/Assess/Inst</td>
<td>EDU 348 Literacy Assess/Inst</td>
</tr>
<tr>
<td>ED 382 Lit Pract: Strug Rdrs Gr 1-4</td>
<td>EDU 349 Pract: Lit Assess/Instr</td>
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<tr>
<td>ED 446 Adv Literacy Assess/Inst K-12</td>
<td>EDU 485 Adv Literacy Assess/Inst</td>
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<tr>
<td>ED 460 Prof/Rsc/Ltcr Ed</td>
<td>EDU 489 Rsc/Prof/Ltcr Ed</td>
</tr>
<tr>
<td>ED 461 Capstone Literacy Prac: Strug Rdrs Gr K-12</td>
<td>EDU 459 Pract: Capstone Literacy</td>
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<tr>
<td>ENG 352 Meth Tch Comp</td>
<td>TBD</td>
</tr>
<tr>
<td>ENG 353 Meth Tch Lit</td>
<td>TBD</td>
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</table>

Select 4-5 credits from the following: 4-5 credits

| DR 401 Crv Drama Meth (2) | TBD |
| ED 346 Early Lit (3) | TBD |
| ED 431 Meth/Mat/Sc/Elem/Soc/Dis/ Cognitive Delay (4) | TBD |
| ED 445 Meth/Tch Cntnt Area Lit (2) | TBD |
| ENG 413 Hist/Sci/Struc/Nat Lang (4) | TBD |
| ENG 360 Children’s Lit (4) | TBD |
| ENG 360 Young Adult Lit (4) | TBD |

Total Credits 32-36

**Mathematics Minor**

**General Education**

<table>
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<tr>
<th>Pre-Fall 2009/10 UMW Course</th>
<th>OCEH Equivalent Course</th>
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<tr>
<td>MATH 131 Probability</td>
<td>STAT 121 Probability</td>
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<tr>
<td>PHYS 233 General Physics</td>
<td>PHYX 220 Physics I</td>
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<tr>
<td>MATH 201 Calculus I</td>
<td>M 171 Calculus I</td>
</tr>
<tr>
<td>MATH 202 Calculus II</td>
<td>M 172 Calculus II</td>
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<tr>
<td>MATH 260 Linear Algebra</td>
<td>M 221 Intro/Linear Algebra</td>
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<tr>
<td>MATH 341 College Geometry</td>
<td>M 329 Modern Geometry</td>
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<td>MATH 345 Found/Math</td>
<td>M 345 Found/Math</td>
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<tr>
<td>MATH 351 Meth/Mat in Math</td>
<td>EDU 497 Meth: 5-12 Math</td>
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Select 1 from the following: 4 credits

| MATH 232 Statistics (4) | STAT 217 Int Stats Cpts (4) |
| MATH 333 Math Stats (4) | STAT 422 Math Stats (4) |
| MATH 203 Calculus II | M 273 Multivar Calculus (4) |
| MATH 311 Ord Diff Eq (4) | M 274 Intro/Diff Eq (4) |
| MATH 401 Determin Modling (4) | M 414 Determin Models (4) |
| MATH 433 Stochast Modling (4) | STAT 433 Stoch Modling (4) |

Select 1 from the following: 4 credits

| MATH 441 Adv Calculus (4) | M 435 Adv Calculus I (4) |
| MATH 442 Complex Variables (4) | M 472 Intro/Complex Analys |
| MATH 443 Abstract Algebra (4) | M 431 Abstract Algebra I (4) |
| MATH 444 Adv Nth Theory (4) | M 444 Adv Nth Theory (4) |

Total Credits 36

The University of Montana Western Catalog 2010-2011

---
# BS: Secondary Education Minor Areas

## Music K-12 Minor

<table>
<thead>
<tr>
<th>Pre-Fall 2009/10 UMW Course</th>
<th>OCHE Equivalent Course</th>
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<tbody>
<tr>
<td>ED 379 Music/Elem Teachers</td>
<td>EDU 306 Music/Elem Teachers</td>
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<tr>
<td>MUS 131 Music Theory I (2)</td>
<td>MUS 107 Music Theory I</td>
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<tr>
<td>MUS 141 Applied Musshp I (2)</td>
<td>MUS 109 Music Theory II</td>
<td>4</td>
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<tr>
<td>MUS 132 Music Theory II (2)</td>
<td>MUS 110 Music Theory III</td>
<td>4</td>
</tr>
<tr>
<td>MUS 162 Voice in Class</td>
<td>MUS 132 Voice in Class</td>
<td>4</td>
</tr>
<tr>
<td>MUS 202 Intro/Music Lit</td>
<td>MUS 202 Intro/Music Lit</td>
<td>4</td>
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<tr>
<td>MUS 209 String Methods</td>
<td>TBD</td>
<td>1</td>
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<tr>
<td>MUS 212 Woodwind Methods</td>
<td>MUS 133 Tech: Woodwinds</td>
<td>1</td>
</tr>
<tr>
<td>MUS 213 Brass Methods</td>
<td>TBD</td>
<td>1</td>
</tr>
<tr>
<td>MUS 214 Percussion Methods</td>
<td>MUS 134 Tech: Percussion</td>
<td>1</td>
</tr>
<tr>
<td>MUS 351 Meth/Mat in Music</td>
<td>MUS 497 Methods: Sec Music</td>
<td>4</td>
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<tr>
<td>MUS 372 Conducting</td>
<td>TBD</td>
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<tr>
<td>Select 2 credits from Lessons:</td>
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</table>

**Total Credits** 35

## Special Education K-12 Minor

<table>
<thead>
<tr>
<th>Pre-Fall 2009/10 UMW Course</th>
<th>OCHE Equivalent Course</th>
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<tbody>
<tr>
<td>ED 281 Prtnrshps/Colleg</td>
<td>EDU 207 Prtnrshps/Colleg</td>
<td>4</td>
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<tr>
<td>ED 381 Intro/Litry Assess/Instruc</td>
<td>EDU 309 Litry Assess/Instruc</td>
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<tr>
<td>MUS 132 Music Theory II (2)</td>
<td>MUS 109 Music Theory II</td>
<td>4</td>
</tr>
<tr>
<td>MUS 162 Voice in Class</td>
<td>MUS 132 Voice in Class</td>
<td>4</td>
</tr>
<tr>
<td>MUS 202 Intro/Music Lit</td>
<td>MUS 202 Intro/Music Lit</td>
<td>4</td>
</tr>
<tr>
<td>MUS 209 String Methods</td>
<td>TBD</td>
<td>1</td>
</tr>
<tr>
<td>MUS 212 Woodwind Methods</td>
<td>MUS 133 Tech: Woodwinds</td>
<td>1</td>
</tr>
<tr>
<td>MUS 213 Brass Methods</td>
<td>TBD</td>
<td>1</td>
</tr>
<tr>
<td>MUS 214 Percussion Methods</td>
<td>MUS 134 Tech: Percussion</td>
<td>1</td>
</tr>
<tr>
<td>MUS 351 Meth/Mat in Music</td>
<td>MUS 497 Methods: Sec Music</td>
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<tr>
<td>MUS 372 Conducting</td>
<td>TBD</td>
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<tr>
<td>Select 2 credits from Ensembles:</td>
<td>TBD</td>
<td>2</td>
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</tbody>
</table>

**Total Credits** 31

Note: Ensemble participation is expected of Music K-12 Minors each semester of full-time attendance, except the student teaching semester. Also, there are piano and voice requirements for the Music Education professional. Consult Music faculty for details.

Note: For Special Ed Minor, endorsement and transfer students must take ED 341 prior to any 400-level courses.
BS: Secondary Education
Coaching Option

Note: The Coaching Option may be taken with any Education degree, but does not lead to licensure.

<table>
<thead>
<tr>
<th>Coaching Option¹</th>
<th>Pre-Fall 2009 UMW Course</th>
<th>OCHE Equivalent Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>HHP 311 Athletic Training I</td>
<td>TBD</td>
<td>4</td>
</tr>
<tr>
<td>HHP 315 Biomechanics</td>
<td>TBD</td>
<td>4</td>
</tr>
<tr>
<td>HHP 350 Coaching; Pedagog/Admin; Ethics</td>
<td>TBD</td>
<td>4</td>
</tr>
<tr>
<td>HHP 416 Cond Prog Devel</td>
<td>TBD</td>
<td>4</td>
</tr>
<tr>
<td>Select 3 from the following:</td>
<td>TBD</td>
<td>6</td>
</tr>
<tr>
<td>HHP 352 Coach/Basketball (2)</td>
<td>TBD</td>
<td></td>
</tr>
<tr>
<td>HHP 353 Coach/Track/Field (2)</td>
<td>TBD</td>
<td></td>
</tr>
<tr>
<td>HHP 354 Coach/Baseball/Softball (2)</td>
<td>TBD</td>
<td></td>
</tr>
<tr>
<td>HHP 355 Coach/Football (2)</td>
<td>TBD</td>
<td></td>
</tr>
<tr>
<td>HHP 356 Coach/Wrestling (2)</td>
<td>TBD</td>
<td></td>
</tr>
<tr>
<td>HHP 358 Coach/Volleyball (2)</td>
<td>TBD</td>
<td></td>
</tr>
<tr>
<td>HHP 359 Officiating (2)</td>
<td>TBD</td>
<td></td>
</tr>
</tbody>
</table>

Total Credits 22

¹ Students completing this option are encouraged to take HHP 410 Athletic Training II.
Associate of Applied Science: Business

Program Mission Statement

The AAS: Business degree provides a variety of program options to suit the student’s career plans. The broadly based program provides the opportunity to develop, improve, or update knowledge and skills, as well as specialize in a selected area. Available options are Business Management, Computer-Aided Manufacturing, and Office Systems Technology. This is an articulated degree through Tech Prep.

Graduate Outcomes

Program graduates:
• can define and create a business plan, define the concept of entrepreneurship, and identify basic types of start-up ventures.
• understand the process of filing for legal protection of ideas, and understand the legal issues surrounding starting or expanding businesses.
• understand and apply fundamental accounting principles, skills, and processes.
• understand the basic legal processes and concepts associated with business.
• possess at least a basic working knowledge of computer hardware and software tools including word processing, spreadsheets, and databases.
• understand market price determination, production theory, elements of value, and distribution theory.
• exhibit effective oral and written communication skills for successful interaction in the business setting.
• utilize computer software and hardware tools for problem-solving and decision-making.
• can apply microeconomic theory to personal and business decision-making.

Assessment

The graduate outcomes for the AAS: Business are assessed through the graduate/exit survey, employer survey, alumni survey, and review of collected student-generated exhibits over time. The assessment plan for the AAS: Business is available on the web at http://hal.umwestern.edu/administration/vcaa/accreditation/accaasbusiness/.

<table>
<thead>
<tr>
<th>Pre-Fall 2009 UMW Course</th>
<th>OCHE Equivalent Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 102 Found/Language</td>
<td>WRIT 101 Coll Writing I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 101 or other 100-level</td>
<td>M 100-level course or higher</td>
<td>4</td>
</tr>
<tr>
<td>PSY 100 General Psych</td>
<td>PSTX 100 Intro/Psych</td>
<td>4</td>
</tr>
<tr>
<td>Select 1 from the following:</td>
<td>TDB</td>
<td>4</td>
</tr>
<tr>
<td>ANTH 105 Intro/Ctrl Anthro (4)</td>
<td>SOCI 101 Intro/Sociology (4)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Business Core Credits</th>
<th>22</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 201 Small Bus Develop</td>
<td>TBD</td>
</tr>
<tr>
<td>BUS 217 Bus/Electronic Comm</td>
<td>TBD</td>
</tr>
<tr>
<td>BUS 241 Financial Accounting</td>
<td>ACTG 201 Prin/Fin Accntg</td>
</tr>
<tr>
<td>BUS 280 Business Law</td>
<td>TBD</td>
</tr>
<tr>
<td>COMS 135 Microcomp Appl</td>
<td>CAPP 131 Basic MS Office</td>
</tr>
<tr>
<td>ECON 250 Prin of Economics</td>
<td>ECNS 203 Prin/Micro/Macro</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Option Area Credits</th>
<th>30-31</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select one Option (see next page)</td>
<td>30-31</td>
</tr>
<tr>
<td>Business Management (28-30)</td>
<td></td>
</tr>
<tr>
<td>Computer-Aided Manufacturing (33)</td>
<td></td>
</tr>
<tr>
<td>Office Systems Technology (30-31)</td>
<td></td>
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</tbody>
</table>

TOTAL CREDITS REQUIRED 68-69
## AAS: Business Option Areas

### Business Management Option

<table>
<thead>
<tr>
<th>Pre-Fall 2009 UMW Course</th>
<th>OCHE Equivalent Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 202 Customer Service</td>
<td>TBD</td>
<td>3</td>
</tr>
<tr>
<td>BUS 242 Managerial Acctg</td>
<td>ACTG 202 Prin/Manag Acctng</td>
<td>3</td>
</tr>
<tr>
<td>BUS 304 Leadership</td>
<td>TBD</td>
<td>4</td>
</tr>
<tr>
<td>BUS 325 Prin/Prac/Mgt</td>
<td>TBD</td>
<td>3</td>
</tr>
<tr>
<td>BUS 347 Prin/Prac/Mktg</td>
<td>TBD</td>
<td>3</td>
</tr>
<tr>
<td>COMS 236 Adv Microcomp Appl</td>
<td>CAPP 251 Adv MS Office</td>
<td>4</td>
</tr>
<tr>
<td>BUS/COMS/ECON/HTR Electives</td>
<td>ACTG/BUS/CAPP/COMS/ECNS/</td>
<td>8-10</td>
</tr>
<tr>
<td></td>
<td>ECON/ HTR/ITS Electives</td>
<td></td>
</tr>
</tbody>
</table>

**Total Credits** 28-30

### Computer-Aided Manufacturing Option

**Contact Department Chair regarding continued availability of this option.**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT 110 Technical Writing</td>
<td>4</td>
</tr>
<tr>
<td>IT 130 Graphic Communication</td>
<td>3</td>
</tr>
<tr>
<td>IT 135 Computer-Aided Drafting</td>
<td>4</td>
</tr>
<tr>
<td>IT 140 Metal Materials &amp; Processes</td>
<td>4</td>
</tr>
<tr>
<td>IT 240 Wood/Synthetic Product Syst</td>
<td>3</td>
</tr>
<tr>
<td>IT 241 Machining</td>
<td>3</td>
</tr>
<tr>
<td>IT 245 Wood Technology in Industry</td>
<td>4</td>
</tr>
<tr>
<td>IT 260 Comp-Aided Manufg-Metals</td>
<td>4</td>
</tr>
<tr>
<td>IT 345 Comp-Aided Manuftrng</td>
<td>4</td>
</tr>
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</table>

**Total Credits** 33

### Office Systems Technology Option

<table>
<thead>
<tr>
<th>Course</th>
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</thead>
<tbody>
<tr>
<td>BUS 200 Cooperative Education</td>
<td>2-3</td>
</tr>
<tr>
<td>COMS 205 Business Info Systems</td>
<td>TBD</td>
</tr>
<tr>
<td>COMS 210 Comp Hrdwr/Sftwr Mgt</td>
<td>ACTG 205 Comp Hrdwr/Sftwr Mgt</td>
</tr>
<tr>
<td>COMS 234 Multimedia</td>
<td>CAPP 160 Multimed/MS Publ/Ppt</td>
</tr>
<tr>
<td>COMS 135 Microcomp Appl</td>
<td>CAPP 131 Basic MS Office</td>
</tr>
<tr>
<td>COMS 236 Adv Microcomp Appl</td>
<td>CAPP 251 Adv MS Office</td>
</tr>
<tr>
<td>COMS 212 Intro/Web Design</td>
<td>TBD</td>
</tr>
<tr>
<td>BUS/COMS/ECON/HTR Electives</td>
<td>ACTG/BUS/CAPP/COMS/ECNS/</td>
</tr>
<tr>
<td></td>
<td>ECON/ HTR/ITS Electives</td>
</tr>
</tbody>
</table>

**Total Credits** 30-31
Associate of Applied Science:
Early Childhood Education

Program Mission Statement

The AAS: Early Childhood Education prepares early childhood practitioners to meet the unique needs of children from birth through age eight and their families in a variety of early childhood settings including child care homes and centers, Head Starts, pre-schools, etc. The program features a lab with each early childhood course, allowing ample opportunity to “learn through doing”. Students also have many opportunities to interact with peers and professionals in the field.

This is an articulated degree through Tech Prep. Courses are offered in Billings, Bozeman, Butte, Dillon, Great Falls, Hamilton, Havre, Helena, and Missoula. See BS: Early Childhood Education (page 92) for an advanced educational opportunity in early childhood.

Graduate Outcomes

Program graduates will:
- know and understand young children’s characteristics and needs.
- know and understand the multiple influences on development and learning.
- use developmental knowledge to create healthy, respectful, supportive, and challenging learning environments.
- know about and understand family and community characteristics.
- support and empower families and communities through respectful, reciprocal relationships.
- involve families and communities in their children’s development and learning.
- understand the goals, benefits, and uses of assessment.
- know about and use observation, documentation, and other appropriate assessment tools and approaches.
- understand and practice responsible assessment.
- know about assessment partnerships with families and other professionals.
- know, understand, and use positive relationships and supportive interactions.
- know and understand the importance, central concepts, inquiry tools, and structures of content areas or academic disciplines.
- use own knowledge and other resources to design, implement, and evaluate meaningful, challenging curriculum to promote positive outcomes.
- identify and involve themselves with the early childhood field.
- know about and uphold ethical standards and other professional guidelines.
- engage in continuous, collaborative learning to inform practice.
- integrate knowledgeable, reflective, and critical perspectives on early education.

Assessment

The graduate outcomes for the AAS: Early Childhood Education are assessed through employer surveys, alumni surveys, student exit surveys, review of portfolio artifacts, observations of students in practicum sites, early childhood content structured oral comprehensive interview, program self-study, and reports from external reviews. The assessment plan for the AAS: Early Childhood Education is available on the web at http://www.umwestern.edu/administration/vcaa/accreditation/accaasece/.
# AAS: Early Childhood Education

Students must maintain a 3.00 GPA in the following Early Childhood Education core courses with no grade lower than a “C-“:
ED 142/143, ED 144/145, ED 240/241, ED 246/247, ED 250/251, ED 320/321, ED 324/325

### General Education

**General Education (page 42)**

<table>
<thead>
<tr>
<th>Pre-Fall 2009 UMW Course</th>
<th>OCHE Equivalent Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behavioral/Social Science</td>
<td>TBD</td>
<td>3-4</td>
</tr>
<tr>
<td>English</td>
<td>TBD</td>
<td>3-4</td>
</tr>
<tr>
<td>Math</td>
<td>TBD</td>
<td>3-4</td>
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<tr>
<td>Natural Science</td>
<td>TBD</td>
<td>3-4</td>
</tr>
<tr>
<td>COMS 101 Intro/Comp/Pres</td>
<td>CAPP 100 Shl Csw: Cmp Lit</td>
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**General Education Credits** 13-17

### Early Childhood Core

**Early Childhood Core**

<table>
<thead>
<tr>
<th>Course</th>
<th>Pre-Fall 2009 UMW Course</th>
<th>OCHE Equivalent Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ED 142 Intro/Early Childhood</td>
<td>TBD</td>
<td>TBD</td>
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<tr>
<td>ED 143 Intro/Early Childhood Lab</td>
<td>TBD</td>
<td>TBD</td>
<td>1</td>
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<tr>
<td>ED 144 Creat/Envt/Learning</td>
<td>TBD</td>
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<td>2</td>
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<tr>
<td>ED 145 Creat/Envt/Learning Lab</td>
<td>TBD</td>
<td>TBD</td>
<td>1</td>
</tr>
<tr>
<td>ED 240 Positv Child Discipline</td>
<td>TBD</td>
<td>TBD</td>
<td>2</td>
</tr>
<tr>
<td>ED 241 Positv Child Discipline Lab</td>
<td>TBD</td>
<td>TBD</td>
<td>1</td>
</tr>
<tr>
<td>ED 242 Meeting Needs of Family</td>
<td>TBD</td>
<td>TBD</td>
<td>2</td>
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<tr>
<td>ED 243 Meet/Needs of Family Lab</td>
<td>TBD</td>
<td>TBD</td>
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<tr>
<td>ED 250 Child/Adol Growth/Develop</td>
<td>TBD</td>
<td>TBD</td>
<td>3</td>
</tr>
<tr>
<td>ED 251 Child/Adol Growth/Develop Lab</td>
<td>TBD</td>
<td>TBD</td>
<td>1</td>
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<tr>
<td>ED 320 Early Childhood Curric I</td>
<td>TBD</td>
<td>TBD</td>
<td>2</td>
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<tr>
<td>ED 321 Early Childhood Curric I Lab</td>
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<tr>
<td>ED 324 Early Childhood Curric II</td>
<td>TBD</td>
<td>TBD</td>
<td>2</td>
</tr>
<tr>
<td>ED 325 Early Childhood Curric II Lab</td>
<td>TBD</td>
<td>TBD</td>
<td>1</td>
</tr>
<tr>
<td>ED 344 Early Childhood Profess</td>
<td>TBD</td>
<td>TBD</td>
<td>2</td>
</tr>
<tr>
<td>ED 345 Early Childhood Profess Lab</td>
<td>TBD</td>
<td>TBD</td>
<td>1</td>
</tr>
<tr>
<td>Cultural Course</td>
<td>TBD</td>
<td>TBD</td>
<td>3-4</td>
</tr>
<tr>
<td>Art, Drama, Music Elective</td>
<td>TBD</td>
<td>TBD</td>
<td>3-4</td>
</tr>
<tr>
<td>Health, Safety, Nutrition Elective</td>
<td>TBD</td>
<td>TBD</td>
<td>3-4</td>
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</tbody>
</table>

**Core Credits** 33-36

### Professional Electives

**Professional Electives**

<table>
<thead>
<tr>
<th>Course</th>
<th>Pre-Fall 2009 UMW Course</th>
<th>OCHE Equivalent Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED 200 Early Childhood Internship (6)</td>
<td>TBD</td>
<td>TBD</td>
<td>6</td>
</tr>
<tr>
<td>ED 326 Infnt/Tddlr Dev/Group Care (4)</td>
<td>TBD</td>
<td>TBD</td>
<td>4</td>
</tr>
<tr>
<td>ED 341 Exceptional Learner (3)</td>
<td>TBD</td>
<td>TBD</td>
<td>3</td>
</tr>
<tr>
<td>ED 421 Creativity/Young Child: Exploring Reggio Emilia &amp; Project Approach (3)</td>
<td>TBD</td>
<td>TBD</td>
<td>3</td>
</tr>
<tr>
<td>ED 279 Curric/Diverse Learners (2)</td>
<td>TBD</td>
<td>EDU 280 Curr/Divers Lmr (2)</td>
<td>1</td>
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</table>

**Professional Elective Credits** 7-14

**TOTAL CREDITS REQUIRED** 60
Associate of Applied Science: Education Studies

Program Mission Statement

The AAS: Education Studies combines carefully selected General Education, Professional Education, and technology coursework with hands-on field experiences that provide the paraprofessional (teacher’s aide) with the expertise to effectively offer support and assistance in instruction to students under the supervision of the classroom teacher. Field experiences must take place at approved off-campus sites.

Several courses in this degree can be applied to a BS degree in Elementary Education or Secondary Education.

Graduate Outcomes

Program graduates will:
- become proficient in reading, writing, and content area skills.
- understand the foundations of Paraprofessional Studies.
- understand and recognize individual learning differences.
- understand and acknowledge the differences in development and characteristics of learners.
- understand and use a variety of instructional strategies to encourage students’ development.
- be able to create learning environments that encourage positive social interactions.
- understand how to plan instruction based upon knowledge of subject matter, students, the community, and curriculum goals.
- understand formal and informal assessment strategies.
- understand how to use reflection to evaluate the effects of his/her choices and actions on others.
- understand how to build collaborative relationships with others.
- understand how to use effective verbal, nonverbal, and media communication techniques.

Assessment

The graduate outcomes for the AAS: Education Studies are assessed through students' discipline-specific knowledge, skills, and abilities in their courses in at least one of the following ways: portfolio, presentation, exams, assignments. The assessment plan for the AAS: Education Studies is available on the web at http://www.umwestern.edu/administration/vcaa/accreditation/accaased/.
## AAS: Education Studies

### First Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Pre-Fall 2009 UMW Course</th>
<th>OCHE Equivalent Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMS 115 Intro to Computers</td>
<td>TBD</td>
<td>TBD</td>
</tr>
<tr>
<td>ED 120 Becom/Prof Educator</td>
<td>TBD</td>
<td>TBD</td>
</tr>
<tr>
<td>ENG 102 Found/Language</td>
<td>TBD</td>
<td>TBD</td>
</tr>
<tr>
<td>MATH 007 Algebra (if needed based on scores of ACT/SAT or Math Placement test; credits do not apply toward graduation)</td>
<td>TBD</td>
<td>TBD</td>
</tr>
<tr>
<td>ED 201 Intro/Special Education</td>
<td>TBD</td>
<td>TBD</td>
</tr>
<tr>
<td>ED 240 Positive Child Discipline</td>
<td>TBD</td>
<td>TBD</td>
</tr>
</tbody>
</table>

Select 4 credits from the following:

- ART 101 Fundamentals of Art (4)
- DR 101 Drama Fundamentals (2)
- MUS 101 Music Fundamentals (2)
- THTR 101 Intro/Theatre (4)

Select 1 from the following:

- PSY 100 General Psych (4)
- SOC 115 Intro/Sociology (4)
- ED 250 Child Growth/Develop (3)
- ED 253 Psych Found/Teach/Learn (4)

Select 1 from the following:

- MATH 105 Number Theory (4)
- MATH 106 Geometry (4)

**Total First Year Credits**: 35-36

### Second Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Pre-Fall 2009 UMW Course</th>
<th>OCHE Equivalent Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED 255 Contemp Amer Indian Ed</td>
<td>TBD</td>
<td>TBD</td>
</tr>
<tr>
<td>ED 270 Literacy/Lang/Texts</td>
<td>TBD</td>
<td>TBD</td>
</tr>
<tr>
<td>ED 283 Strat/Tutoring Lang Arts/Math</td>
<td>TBD</td>
<td>TBD</td>
</tr>
<tr>
<td>ED 285 Students w/Severe Disabilities</td>
<td>TBD</td>
<td>TBD</td>
</tr>
<tr>
<td>ED 289 Paraprofessional Internship</td>
<td>TBD</td>
<td>TBD</td>
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<tr>
<td>Science Elective</td>
<td>TBD</td>
<td>TBD</td>
</tr>
<tr>
<td>HHP 231 First Aid/Safety</td>
<td>TBD</td>
<td>TBD</td>
</tr>
</tbody>
</table>

Select 1 from the following:

- ED 242/243 Meet Needs/Family (2)
- ED 281 Prtnrships/Collaboration (4)

Select 1 from the following:

- HHP 241 Pers/Community Health (4)
- HHP 245 Human Sexuality (4)
- HHP 454 Adapted PE & Recreation (4)

**Total Second Year Credits**: 31-32

Credits are not counted in total credits for degree.
Associate of Applied Science:
Equine Studies

Program Mission Statement

The mission of the AAS: Equine Studies is to provide students with a realistic venue for pursuing their passion for horses. The program is designed to increase students’ knowledge of the science, behavior, care, and management of horses, and to expand their awareness of the equine industry well above that of the average horseperson. Montana Western’s experiential approach and broad-based curriculum allows the successful graduate to pursue a wide range of equine-related professions.

Students in the AAS: Equine Studies will have an emphasis in Management, which prepares students for running an equine-related business. Students interested in continuing into the BS: Natural Horsemanship degree program (page 80) in the Science or Psychology Options are encouraged to take electives in those subject areas.

Graduate Outcomes

Program graduates will:
- be well-versed in general knowledge about the equine industry including the common breeds, equine activities and events, and equine-related career options.
- understand the principles of equine nutrition and basic horse care to maximize horse health and performance.
- understand the basic anatomy and physiology of the horse, and be conversant with the common disease and lameness problems seen in horses.
- be knowledgeable about selecting, evaluating, and purchasing horses.
- understand and implement basic preventative herd health programs for horses.
- communicate effectively, both orally and in writing, on equine-related subjects with a wide variety of equine professionals and others in the industry.
- work collegially with others.
- possess the knowledge and skills required to assess a horse’s basic health status.
- be able to assess a horse’s conformation and gait and relate it to that horse’s suitability, function, and health.
- be able to recognize and evaluate a variety of horse feeds and pasture situations.
- be conversant about and able to recognize common disease problems in horses.
- understand and evaluate the effectiveness of equine preventative health programs.

Assessment

The graduate outcomes for the AAS: Equine Studies are assessed through the graduate/exit survey, employer survey, alumni survey, feedback from internship supervisors, and review of collected student-generated exhibits over time. The assessment plan for the AAS: Equine Studies is available on the web at http://www.umwestern.edu/administration/vcaa/accreditation/accaasequine/.
## AAS: Equine Studies

### General Education

<table>
<thead>
<tr>
<th>Pre-Fall 2009 UMW Course</th>
<th>OCHE Equivalent Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 102 Found/Language</td>
<td>WRIT 101 Coll Writing I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 101 Logic or higher</td>
<td>M 100-level course or higher</td>
<td>4</td>
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</table>

**Behavioral & Social Science**

Select 1 from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Equivalent Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 100 General Psych (4)</td>
<td>PSYX 100 Intro/Psych</td>
</tr>
<tr>
<td>ECON 250 Prin/Economics (4)</td>
<td>ECNS 203 Prin/Micro/Macro</td>
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**Total General Education Credits**: 16

### Equine Studies Core

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>EQST 101 Intro to Equine Studies</td>
<td>TBD</td>
</tr>
<tr>
<td>EQST 102 Equine Select/Judging</td>
<td>TBD</td>
</tr>
<tr>
<td>EQST 200 Internship</td>
<td>TBD</td>
</tr>
<tr>
<td>EQST 201 Basc Horse Care/Nutr</td>
<td>TBD</td>
</tr>
<tr>
<td>EQST 202 Basc Equine Science I</td>
<td>TBD</td>
</tr>
<tr>
<td>EQST 203 Basc Equine Science II</td>
<td>TBD</td>
</tr>
<tr>
<td>EQST 204 Equine Facilities Mgt</td>
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</table>

**Total Equine Studies Core Credits**: 28

### EQST: Management Option

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 201 Small Bus Development</td>
<td>TBD</td>
</tr>
<tr>
<td>BUS 241 Financial Accounting</td>
<td>ACTG 201 Prin/Fin Acctng</td>
</tr>
<tr>
<td>BUS 280 Business Law</td>
<td>TBD</td>
</tr>
</tbody>
</table>

**Total Option Credits**: 20

**Total Credits Required**: 64

---

1 Students interested in the BS: Natural Horsemanship Psychology Option should take PSY 100/PSYX 100 as General Education requirement and ECON 250/ECNS 203 as Professional Elective.
Program Mission Statement

The mission of the AAS: Natural Horsemanship is to provide students with an education in equine theory and science combined with the practical skills of natural horsemanship. Horsemanship skills taught in the practical classes are heavily based on the principles of equine behavior along with the horse training methods of experts renowned in natural horsemanship and similar disciplines. Academic aspects of the program are designed to increase students' knowledge of the science, care, and management of horses, and to expand their awareness of the equine industry well above that of the average horseperson. Montana Western’s experiential approach and broad-based curriculum allows the successful graduate to pursue a wide range of equine-related professions.

In addition to general admission to UMW, students interested in the Natural Horsemanship Program must apply by March 1st for the introductory Natural Horsemanship classes that will start that fall. The Natural Horsemanship Admissions committee will evaluate prospective students based on a combination of academic ability, horsemanship experience, natural horsemanship experience (if any), and student desire for participation in the program. Application forms for the program are available from the Admissions Office or through the UMW Natural Horsemanship website at http://hal.umwestern.edu/shares/bus_share/eq.html.

Natural horsemanship students must provide their own horse, housing for that horse, and horse transportation to and from the class facility. UMW natural horsemanship instructors will determine the ultimate suitability of the horse; stallions or untrained horses are not acceptable.

Montana Western’s Natural Horsemanship program is demanding for both the students and their horses. Completion of the program in the allotted time frame demands that the student take a class overload. The UMW Academic Admissions and Standards Committee generally requires that a student Taking a class overload maintain a B average. Therefore, a goal of academic excellence is a “must” for the interested participant. See BS: Natural Horsemanship, page 80.

To ensure that the Bachelor’s degree program graduates only the most outstanding students, a secondary assessment of prospective Bachelor’s degree students will be made after the second year or between the Associate of Applied Science and Bachelor’s degrees. Students will have to demonstrate a given level of proficiency in horsemanship, theory about natural horsemanship, and knowledge of basic equine science and horse care to advance to the 300-400 level natural horsemanship courses.

Graduate Outcomes

Program graduates:
- are proficient in methods of horsemanship based on the theories of natural horsemanship and similar disciplines.
- understand the principles of equine behavior and how they relate to horsemanship.
- are well-versed in general knowledge about the equine industry including the common breeds, equine activities and events, and equine-related career options.
- understand the principles of equine nutrition and basic horse care to maximize horse health and performance.
- understand the basic anatomy and physiology of the horse, and be conversant with the common disease and lameness problems seen in horses.
- understand and implement basic preventative herd health programs for horses.
- communicate effectively, both orally and in writing, on equine-related subjects with a wide variety of equine professionals and others in the industry.
- work collegially with others.
- are able to assess and work with a horse in most situations encountered during normal handling and riding activities.
- possess the knowledge and skills required to assess a horse’s basic health status.
- are able to assess a horse’s conformation and gait and relate it to that horse’s suitability, function, and health.
- are able to recognize and evaluate a variety of horse feeds and pasture situations.
- are conversant about and able to recognize common disease problems in horses.
- understand and can evaluate the effectiveness of equine preventative health programs.

Assessment

The graduate outcomes for the AAS: Natural Horsemanship are assessed through the graduate/exit survey, employer survey, alumni survey, feedback from internship supervisors, and review of collected student-generated exhibits over time. The assessment plan for the AAS: Natural Horsemanship is available on the web at http://www.umwestern.edu/administration/vcaa/accreditation/accaasnatural/.
AAS: Natural Horsemanship

General Education Credits 16

<table>
<thead>
<tr>
<th>Pre-Fall 2009/10 UMW Course</th>
<th>OCHE Equivalent Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 102 Found/Language</td>
<td>WRIT 101 Coll Writing 1</td>
</tr>
<tr>
<td>MATH 101 Logic or higher</td>
<td>M 100-level course or higher</td>
</tr>
</tbody>
</table>

Behavioral & Social Sciences
Select 1 from the following: 1

| PSY 100 General Psych (4)   | PSX 100 Intro/Psych  |
| ECON 250 Prin/Economics (4) | ECNS 203 Prin/Micro/Macro |

Select 1 from the following: 4

| BIO 101 Intro/Life Science (4) | BOB 101 Discover Biol (4) |
| BIO 111 Biology I (4)          | BOB 160 Prin/Living Syst (4) |

Behavioral & Social Sciences
Select 1 from the following:

| PSY 100 General Psych (4)   | PSX 100 Intro/Psych  |
| ECON 250 Prin/Economics (4) | ECNS 203 Prin/Micro/Macro |

Select 1 from the following: 4

Natural Horsemanship Core

| EQST 101 Intro/Equine Studies | TBD |
| EQST 155 Intro/NH: Gain Conf/Rspct | TBD |
| EQST 200 Internship | TBD |
| EQST 201 Bsc Horse Care/Nutrition | TBD |
| EQST 202 Bsc Equine Sci I | TBD |
| EQST 203 Bsc Equine Sci II | TBD |
| EQST 204 Equine Facilities Mgt | TBD |
| EQST 252 NH: Build/Relationship | TBD |
| EQST 254 NH: Harmony w/Horse I | TBD |
| EQST 255 NH: Harmony w/Horse II | TBD |

Natural Horsemanship Core Credits 36

Core Credits

| EQST 101 Intro/Equine Studies | TBD |
| EQST 155 Intro/NH: Gain Conf/Rspct | TBD |
| EQST 200 Internship | TBD |
| EQST 201 Bsc Horse Care/Nutrition | TBD |
| EQST 202 Bsc Equine Sci I | TBD |
| EQST 203 Bsc Equine Sci II | TBD |
| EQST 204 Equine Facilities Mgt | TBD |
| EQST 252 NH: Build/Relationship | TBD |
| EQST 254 NH: Harmony w/Horse I | TBD |
| EQST 255 NH: Harmony w/Horse II | TBD |

NH: Management Option

| BUS 201 Small Bus Development | TBD |
| BUS 241 Financial Accounting | ACTG 201 Prin/Fin Acctng |
| BUS 280 Business Law | TBD |

Professional Electives
Select 10 credits from:

| BUS 201 Small Bus Development | TBD |
| BUS 241 Financial Accounting | ACTG 201 Prin/Fin Acctng |
| BUS 280 Business Law | TBD |

Any EQST course not taken in Natural Horsemanship core
Any ACTG/BUS/CAPP/COMS/ECNS/ECON/HTR/ITS course not listed above

TOTAL CREDITS REQUIRED 72

1 Students interested in the BS: Natural Horsemanship Psychology Option should take PSY 100/PSYX 100 as General Education requirement and ECON 250/ECNS 203 as Professional Elective.
Program Mission Statement

The mission of the AAS: Tourism and Recreation is to introduce students to the tourism industry and its various components. This program aspires to develop professionals who are able to succeed in entry-level professional positions in hospitality, tourism, and recreation.

Graduate Outcomes

Program graduates:

• develop and manage effective customer service systems including recognizing potential problems, formulating effective solutions to service problems, calming upset customers, and training frontline customer service personnel.
• establish short- and long-term career goals.
• understand and apply fundamental accounting principles, skills, and processes.
• understand the fundamental concepts and practices of marketing including global marketing management, e-commerce, e-business, and e-marketing.
• possess at least a basic working knowledge of computer hardware and software tools including word processing, spreadsheets, and databases.
• are familiar with the tourism industry and its various components.
• understand and apply leadership techniques and principles including positive interpersonal relationships, motivation, listening, trust-building, positive attitudes, delegating responsibilities, and decision-making.
• identify and can describe major tourism attractions throughout the world and particularly in the United States.
• possess real-world experience in a tourism and recreation setting.
• utilize computer software and hardware tools to present information in a clear and concise format.
• exhibit effective oral and written communication skills for successful interaction in a customer service environment.
• present a professional image through written and oral presentations and business communications.
• have an understanding of spatial organization of human activities and settlement.
• understand how economics impacts and drives business decisions.
• understand the history and social impact of leisure and recreation on society.

Assessment

The graduate outcomes for the AAS: Tourism and Recreation are assessed through the graduate/exit survey, employer survey, alumni survey, feedback from internship supervisors, and review of collected student-generated exhibits over time. The assessment plan for the AAS: Tourism and Recreation is available on the web at www.umwestern.edu/administration/vcaa/accreditation/accaastourism/.

AAS: Tourism & Recreation……………………………65 credits

<table>
<thead>
<tr>
<th>Pre-Fall 2009 UMW Course</th>
<th>OCHE Equivalent Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 201 Small Bus Development</td>
<td>TBD</td>
</tr>
<tr>
<td>BUS 202 Customer Service</td>
<td>TBD</td>
</tr>
<tr>
<td>BUS 210 Career Planning</td>
<td>TBD</td>
</tr>
<tr>
<td>BUS 217 Bus/Electronic Comm</td>
<td>TBD</td>
</tr>
<tr>
<td>BUS 241 Financial Accting</td>
<td>ACTG 201 Prin/Fin Acctng</td>
</tr>
<tr>
<td>BUS 304 Leadership</td>
<td>TBD</td>
</tr>
<tr>
<td>BUS 247 Prin/Prac/Marketing</td>
<td>TBD</td>
</tr>
<tr>
<td>COMS 115 Comp Basics/Educators</td>
<td>TBD</td>
</tr>
<tr>
<td>ECN 250 Prin/Economics</td>
<td>CNS 203 Prin/MicroMacro</td>
</tr>
<tr>
<td>ENG 102 Found/Language</td>
<td>WRIT 101 Coll Writing I</td>
</tr>
<tr>
<td>HTR 112 Fund/Tourism</td>
<td>TBD</td>
</tr>
<tr>
<td>HTR 200 Internship</td>
<td>TBD</td>
</tr>
<tr>
<td>HTR 210 Destination Geog</td>
<td>TBD</td>
</tr>
<tr>
<td>HTR/HHP 240 Leisure Services</td>
<td>TBD</td>
</tr>
<tr>
<td>MATH Elective</td>
<td>MATH/M Elective</td>
</tr>
<tr>
<td>Electives</td>
<td>TBD</td>
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<tr>
<td>Select 1 of the following:</td>
<td></td>
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<tr>
<td>GEOG 102 Human Geog (4)</td>
<td>GPHY 121 Human Geog (4)</td>
</tr>
<tr>
<td>GEOG 202 Reg Geog/No Amer (4)</td>
<td>GPHY 246 Geog/No Amer (4)</td>
</tr>
<tr>
<td>TBD</td>
<td>SSS 202 Pol Geog/Rky Mtn West (4)</td>
</tr>
</tbody>
</table>
Computerized Machine Tool Technology Certificate Program
(IT courses at Helena College of Technology)

Computerized Machine Tool Technology Certificate……..29 credits

<table>
<thead>
<tr>
<th>Pre-Fall 2009 UMW Course</th>
<th>OCHE Equivalent Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT 130 Graphic Communication</td>
<td>TBD</td>
<td>3</td>
</tr>
<tr>
<td>IT 135 Computer-Aided Drafting</td>
<td>TBD</td>
<td>4</td>
</tr>
<tr>
<td>IT 140 Metal Materials/Processes</td>
<td>TBD</td>
<td>4</td>
</tr>
<tr>
<td>IT 240 Wood/Synthetic Product Systems</td>
<td>TBD</td>
<td>3</td>
</tr>
<tr>
<td>IT 241 Machining</td>
<td>TBD</td>
<td>3</td>
</tr>
<tr>
<td>IT 260 Computer-Aided Mg/Metals</td>
<td>TBD</td>
<td>4</td>
</tr>
<tr>
<td>IT 345 Computer-Aided Manufacturing</td>
<td>TBD</td>
<td>4</td>
</tr>
<tr>
<td>IT 400 Internship</td>
<td>TBD</td>
<td>4</td>
</tr>
</tbody>
</table>

Early Childhood Certificate Program

Early Childhood Certificate.................................30 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ED 142 Intro to Early Childhood</td>
<td>1</td>
</tr>
<tr>
<td>ED 143 Intro to Early Childhood Lab</td>
<td>1</td>
</tr>
<tr>
<td>ED 144 Creating an Envt for Learning</td>
<td>2</td>
</tr>
<tr>
<td>ED 145 Creating an Envt for Learning Lab</td>
<td>1</td>
</tr>
<tr>
<td>ED 240 Positive Child Discipline</td>
<td>2</td>
</tr>
<tr>
<td>ED 241 Positive Child Discipline Lab</td>
<td>1</td>
</tr>
<tr>
<td>ED 242 Meeting Needs of Families</td>
<td>2</td>
</tr>
<tr>
<td>ED 243 Meeting Needs of Families Lab</td>
<td>1</td>
</tr>
<tr>
<td>ED 250 Child Growth/Development</td>
<td>3</td>
</tr>
<tr>
<td>ED 251 Child Growth/Development Lab</td>
<td>1</td>
</tr>
<tr>
<td>ED 292 Intro to Business/Early Childhood</td>
<td>3</td>
</tr>
<tr>
<td>ED 320 Early Childhood Curriculum I</td>
<td>2</td>
</tr>
<tr>
<td>ED 321 Early Childhood Curriculum I Lab</td>
<td>1</td>
</tr>
<tr>
<td>ED 324 Early Childhood Curriculum II</td>
<td>2</td>
</tr>
<tr>
<td>ED 325 Early Childhood Curriculum II Lab</td>
<td>1</td>
</tr>
<tr>
<td>ED 344 Early Childhood Professional</td>
<td>2</td>
</tr>
<tr>
<td>ED 345 Early Childhood Professional Lab</td>
<td>1</td>
</tr>
<tr>
<td>Elective</td>
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</tr>
</tbody>
</table>

Information Technology & Network Administration Certificate Program

Information Technology & Network Administration Certificate..27 credits

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMS 176 Intro/Rout Technol (CISCO II)</td>
<td>4</td>
</tr>
<tr>
<td>COMS 205 Business Info Systems</td>
<td>TBD</td>
</tr>
<tr>
<td>COMS 210 Comp Hrdwr/Softwr Mgt</td>
<td>4</td>
</tr>
<tr>
<td>COMS 226 Routing/Switching (CISCO III)</td>
<td>4</td>
</tr>
<tr>
<td>COMS 276 Network Design (CISCO IV)</td>
<td>4</td>
</tr>
<tr>
<td>COMS 387 Telecommunications</td>
<td>3</td>
</tr>
<tr>
<td>COMS 403 Syst Analysis/Design</td>
<td>4</td>
</tr>
</tbody>
</table>

Note: All Certificate Programs are exempt from the UMW Information & Technology Literacy exam requirement for graduation.
**COURSE DESCRIPTIONS**

**INTRODUCTION**

UMW reserves the right to add, discontinue, cancel, or change offerings listed in this publication as authorized by the Montana University System Board of Regents.

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**Course Numbering**

The following numbers are used to designate courses:

- **000-099** College Prep (does not meet graduation requirements, grades not calculated into GPA)
- **100-199** Primarily for Freshmen (considered lower-level)
- **200-299** Primarily for Sophomores (considered lower-level)
- **300-399** Primarily for Juniors (considered upper-level)
- **400-499** Primarily for Seniors (considered upper-level)
- **191/291/391/491** UMW Experimental or Temporary

---

**UMW OCHE**

<table>
<thead>
<tr>
<th>Course Numbering</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>200/400</td>
<td>Internship/Cooperative Education</td>
</tr>
<tr>
<td>219/419</td>
<td>Directed Study</td>
</tr>
<tr>
<td>290/490</td>
<td>Undergraduate Research</td>
</tr>
<tr>
<td>292/492</td>
<td>Independent Study</td>
</tr>
<tr>
<td>493</td>
<td>Study Tour/Study Abroad</td>
</tr>
<tr>
<td>494</td>
<td>Seminar/Workshop</td>
</tr>
<tr>
<td>495</td>
<td>Field Work/Clinical/Practicum/Student Teaching</td>
</tr>
<tr>
<td>496</td>
<td>Service Learning</td>
</tr>
<tr>
<td>498/499</td>
<td>Senior Project/Theis/Thesis/Capstone</td>
</tr>
</tbody>
</table>

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**OCHE Common Course Numbering**

The Montana University System is in the process of developing simple and clear procedures and policies regarding the transfer of credits among the various units of the system. To assist with this process, some new rubrics and a common course numbering system have been established for certain academic areas to date. Throughout this Catalog, existing UMW rubrics and courses listed refer to any newly established rubrics and equivalent courses (*shown in italics*) that have been approved under this OCHE Common Course Numbering system. Some rubrics are still under review and changes to those rubrics have not yet occurred. Where degree requirements list “TBD” for courses without an approved equivalency to date, the UMW course in the adjacent column is the course being used.

---

**Seminar & Practicum**

Any seminar or practicum must be approved by the Provost. A copy of the academic requirements for completion of the course must be filed with the Provost at the beginning of the semester.

---

**Directed Study (DS)**

All students taking Directed Study courses must sign a written statement prepared jointly by the student and the instructor of record that outlines the course objectives, the intended outcomes or product, and the method of evaluation. The proposal is then approved by the appropriate academic administrator. There are two levels of Independent Study: lower-level (290/292) and upper-level (490/492). Independent Study courses cover subjects/content not found in regular Catalog course offerings. It may be possible for the substitution of an Independent Study for a regular catalog course. If the course is to be substituted for a regular catalog course, prior approval of an instructor who regularly teaches that course must be obtained. A limit of three (3) Independent Study courses will be applicable to graduation. Independent Study courses may be from 1-4 credits.

---

**Corequisite (Coreq)**

A course that must be taken concurrently or in the same term/semester with the course containing the corequisite listing.

---

**Prerequisites (Prereq)**

Requirements or conditions that must be completed prior to enrollment in a course or program, or continuation in a program. Prerequisites for admission to certain courses are indicated by abbreviations as follows:

- **c/dfe** Requires consent of Director of Field Experiences
- **c/i** Requires consent of instructor
- **c/pc** Requires consent of program or department chair
- **c/ve** Requires consent of Vice Chancellor for Academic Affairs/Provost
- **TEP** Requires admission to Teacher Education Program

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**Course Credit**

The credits for the course are listed after the title and generally denote the number of lecture hours per week required for the course. The letter “R” indicates *variable credit*. An “R” indicates that the course may be repeated for credit; for example, R-3 indicates that the course may be taken a total of 4 times—the initial attempt plus three (3) repeats for credit. Equal or equivalent courses are indicated by the equal sign (=).

---

**Timing of Course Offerings**

Students should consult with their advisor to assure that courses will be offered when desired. Note that some courses are offered every semester, some are only offered in the fall or spring, and others are only offered every other year. Designing a 4-year plan of study with the advisor early in a student’s academic career is essential to ensure that students get courses needed to graduate.

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**Cultural Diversity Component**

General Education courses designated with (CD) meet Montana University System components for cultural diversity (see page 43).

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**Course Fees**

NOTE: Additional fees may apply for some courses. For courses that have received Montana Board of Regents approval to assess a specific course fee, the course descriptions indicate that fee. Current course fee information is also available at: http://www.umwestern.edu/current/.

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Unless otherwise specified in this Catalog or formally communicated by the appropriate academic department, students must earn a minimum grade of C- (C minus) or higher to satisfy requirements for all General Education and program course requirements and all General Education and program requirement prerequisite courses.
2010-11 COURSE DESCRIPTIONS

Note: New OCHE Common Course Numbering system rubrics and courses are displayed in italics throughout this Catalog.

ACCOUNTING (ACTG)
[New OCHE rubric effective Fall 2009]

ACTG 201 PRINCIPLES OF FINANCIAL ACCOUNTING (3)
Pre-Fall 2009 UMW course: BUS 241 Financial Accounting
Course emphasizes the understanding of fundamental accounting principles and procedures and will develop the student’s accounting problem-solving and critical thinking abilities. Topics covered include the basic structure of analyzing and recording transactions, establishing accounting policy, generally accepted accounting principles, control of cash, receivables and payables, merchandise inventory evaluation methods, recording of property, plant, and equipment transactions, and long-term financing. Sources of equity capital for corporations and financial statements are analyzed. Prereq: 100-level math, or c/i. (fall/spring)

ACTG 202 PRINCIPLES OF MANAGERIAL ACCOUNTING (3)
Pre-Fall 2009 UMW course: BUS 242 Managerial Accounting
Course emphasizes the fundamental concepts for planning, control, and decision-making. Topics covered include the basic structure of systems design, planning and control through standard costs, cost variance analysis, cost-volume-profit analysis, operating and capital budgets, and using relevant costs in decision-making. Prereq: BUS 241 (ACTG 201) grade C- or higher, and 100-level MATH (M); or c/i. (fall/spring)

ACTG 301 INTERMEDIATE ACCOUNTING I (3)
Pre-Fall 2009 UMW course: BUS 321 Intermediate Accounting I
Brief overview of elementary financial accounting principles with concentrated study of theory and practice relating to assets and liabilities. Prereq: BUS 242 (ACTG 202). (on demand)

ACTG 302 INTERMEDIATE ACCOUNTING II (3)
Pre-Fall 2009 UMW course: BUS 322 Intermediate Accounting II
Financial accounting theory and concepts; concentrated study of problems arising in applying these concepts to assets and liabilities, and owner’s equity. Prereq: BUS 321 (ACTG 301). (on demand)

ACTG 401 PRINCIPLES OF FEDERAL TAXATION-INDIVIDUALS (3)
Pre-Fall 2009 UMW course: BUS 311 Income Tax Accounting
Study of the tax laws applicable to individuals, proprietorships, and partnerships in filing returns and determining taxable income, exemptions, deductions, and credits. Prereq: BUS 242 (ACTG 202). (on demand)

ACTG 410 COST/MANAGEMENT ACCOUNTING I (3)
Pre-Fall 2009 UMW course: BUS 371 Cost Accounting
Elements of product cost including job, process, standard, and variable costing systems and procedures. A managerial emphasis is added through inclusion of cost-volume-profit relationship, budgeting techniques, and other selected topics. Prereq: BUS 322 (ACTG 302). (on demand)

Note: New OCHE Common Course Numbering system rubrics and courses are displayed in italics throughout this Catalog.

ANTHROPOLOGY (ANTH)
[For OCHE equivalent courses effective Fall 2009, see appropriate rubric & course listed beneath individual courses]

ANTH 105 INTRODUCTION TO CULTURAL ANTHROPOLOGY (4)
(CD)
An introduction to the fundamental concepts of cultural anthropology as well as a discussion of the origins and development of several contemporary societies. Primary topics include: (a) social, political, and subsistence patterns; (b) intellectual technical, aesthetic, and cultural structures; and (c) this will further be used to study how the environmental, technological, economic core is related to all other aspects of any society including cultural, political, spiritual, or ideological. In addition, students will look at how societies are integrated into ever larger units of social relationships, particularly integration into a world market economy in the 19th and 20th centuries. Students will demonstrate understanding of course content through written critiques and directed examinations. Lecture and small group discussions. (fall/spring)

ANTH 219 DIRECTED STUDY (V 1-4)
Selected topics under faculty supervision, with emphasis on experiential learning. Prereq: ANTH 105, c/i, c/pc, and c/vc. (on demand)

ANTH 220 INTRODUCTION TO RESEARCH METHODS (4)
See ISSS 220 Introduction to Research Methods

ANTH/HIST/POLS/SOC 221 QUANTITATIVE METHODS FOR SOCIAL SCIENCE (4)
See ISSS 221 Quantitative Research Methods for Social Science

ANTH/HIST/POLS/PSY/SOC 222 QUALITATIVE METHODS FOR SOCIAL SCIENCE (4)
See ISSS 222 Qualitative Research Methods for Social Science

ANTH 290 INDEPENDENT STUDY (V 1-4)
Directed research or study, with emphasis on experiential learning. Prereq: ANTH 105, c/i, c/pc, and c/vc. (on demand)

ANTH/SOC 315 POLITICAL SOCIOLOGY (4)
See ISSS 315 Political Anthropology & Sociology

ANTH 336 MULTICULTURAL IDENTITY (4)
The historical and cross-cultural study of life in a pluralistic society. The self-identity of people according to national and ethnic identities will be examined. Multicultural affairs and institutional equity and diversity are given special attention to align strengths with current and proposed diversity initiatives. Students will participate in supervised research and hands-on experience in institutional settings. Students will be assessed based on class discussions and research projects. Lecture
ANTH 400 COOPERATIVE EDUCATION/INTERNSHIP (V 1-15)
Provides students with an opportunity to incorporate an appropriate extended field experience into their academic program. Field placement options to include all facets of the helping professions. Prereq: ANTH 105 and either ANTH/HIST/ POLS/PSY/SOC 220, or ANTH/HIST/POLS/PSY/SOC 221, or ANTH/HIST/ POLS/PSY/SOC 222, or ISSS 222; and c/i, c/pc, and c/vc. (on demand)

ANTH 409 SEMINAR (4)
Selected topics of interest. Prereq: Junior standing and c/i. (Block 6 even-numbered years)

ANTH 419 DIRECTED STUDY (V 1-4)
Selected topics under faculty supervision, with emphasis on experiential learning. Prereq: ANTH/HIST/POLS/PSY/SOC 220, or ANTH/HIST/POLS/PSY/SOC 221, or ANTH/HIST/POLS/PSY/SOC 222, or ISSS 222; and c/i, c/pc, and c/vc. (on demand)

ANTH/SOC 475 CULTURAL ECOLOGY (4)
See ISSS 475 Cultural Ecology

Note: New OCHE Common Course Numbering system rubrics and courses are displayed in italics throughout this Catalog.

ART (ART)

ART 101 FUNDAMENTALS OF ART (2/4)
This course is intended to provide students with an introductory overview of a variety of visual forms, media, concepts, and theories found in both past and present art practices. It is designed as a series of problems that put principles of two- and three-dimensional design into practical use. These problems stress analytical and creative thinking and self-exploration, and are designed to develop aesthetic sense. The series of assignments—studio work as well as written and oral projects—provide explorative format. Global and multicultural topics are explored through research, presentations by professor and guest artists, visits to galleries, examination of artifacts, discussions of contemporary events and issues. $5 Course Fee. (fall/spring)

ART 105 INTRODUCTION TO ART & DESIGN (4)
This class is designed for non-art majors. Upon completion of this class students will demonstrate the successful application of visual media to the creative and problem-solving processes of identifying and communicating visual messages and personal expression. Students will demonstrate an introductory level understanding of how the visual arts reflect their cultural and historical context. Students will also demonstrate an introductory level understanding of aesthetics and art criticism as expressed in writing exercises.

ART 106 INTRODUCTION TO CALLIGRAPHY (4)
This course introduces calligraphy—the art of beautiful handwriting—with focus on brush and pen techniques and layout. This course is designed for non-art majors. This course also examines calligraphy as an expression of culture and historical context and includes writing exercises in aesthetics and art criticism. $10 Course Fee.

ART 140 COLOR & DESIGN (4)
This studio course introduces the formal elements and principles of design, color theory, and spatial control using traditional and digital media with an emphasis on problem-solving. Students will explore career options related to the visual arts. This course also examines art as an expression of culture and historical context and includes writing exercises in aesthetics and art criticism. (fall)

ART 141 DRAWING (4)
This studio course introduces rendering skills through the use of a variety of drawing media, and the expressive, conceptual, and communication possibilities of drawing as an artistic medium. This course also examines art as an expression of culture and historical context and includes writing exercises in aesthetics and art criticism. (spring)

ART 170 INTRODUCTION TO PHOTOGRAPHY [2-D] (4)
This studio course introduces the basic operation of a 35mm camera and black & white film and printing techniques, and the expressive, conceptual, and communication possibilities of black & white photography as an artistic medium. This course also examines art as an expression of culture and historical context and includes writing exercises in aesthetics and art criticism. $25 Course Fee. (fall/spring)

ART 211 ART HISTORY I (4)
This survey course introduces the art and architecture of western culture from pre-history to the 13th century and non-Western cultures. This course includes writing exercises that examine the relationship between artistic expression, style, and cultural values. (spring)

ART 212 ART HISTORY II (4)
This survey course introduces the art and architecture of Western culture from the 14th to the 20th centuries. This course includes writing exercises that examine the relationship between artistic expression, style, and cultural values. (fall)

ART 219 DIRECTED STUDY (V 1-5)
Selected topics under faculty supervision. Prereq: c/i, c/pc, and c/vc. (fall/spring)

ART 225 DIGITAL MEDIA [2-D] (4)
This studio course introduces the expressive, conceptual, and communication possibilities of digital technology as an artistic medium. This course also examines art as an expression of culture and historical context and includes writing exercises in aesthetics and art criticism. (spring)

ART 231 CERAMICS [3-D] (4)
This studio course introduces basic ceramic hand building, throwing, and glazing techniques, and the expressive, conceptual, and communication possibilities of ceramics as an artistic medium. This course also examines art as an expression of culture and historical
ART 267 PAINTING [2-D] (4)
This directed research or study course is offered on an individual basis. Prereq: c/i, c/pc, and ART 290 INDEPENDENT STUDY (V 1-4)

ART 261 WATERCOLOR [2-D] (4)
This studio course introduces basic opaque painting techniques, and the expressive, conceptual, and communication possibilities of watercolor as an artistic medium. This course also examines art as an expression of culture and historical context and includes writing exercises in aesthetics and art criticism. $60 Course Fee.

ART 343 PRINTMAKING II (4)
This intermediate studio course builds upon the technical and conceptual framework of ART 243 Printmaking, with added emphasis upon personal exploration and expression. $30 Course Fee. Prereq: ART 243.

ART 271 SCULPTURE [3-D] (4)
This intermediate studio course builds upon the technical and conceptual framework of ART 271 Sculpture, with added emphasis upon personal exploration and expression. $60 Course Fee. Prereq: ART 271.

ART 381 ART MEDIA WORKSHOP (V 1-4)
This studio course introduces new or unusual techniques and explores their artistic potential for expression and communication.

ART 300 METHODS & MATERIALS OF ART (4)
Methods, materials, and current research relating to the development of effective art education programs at elementary and secondary levels. $20 Course Fee. Prereq: ED 120 (EDU 201), ED 253 (EDU 222), and TEP. (fall)

ART 270 PHOTOGRAPHY [2-D] (4) R
This studio course builds upon the technical skills developed in ART 170 Introduction to Photography, with added emphasis upon personal exploration and expression. $25 Course Fee. Prereq: ART 170.

ART 377 FIBERS II (4)
This intermediate studio course builds upon the technical and conceptual framework of ART 277 Fibers, with added emphasis upon personal exploration and expression. $40 Course Fee. Prereq: ART 277.

ART 311 TOPICS IN ART HISTORY (V 1-4)
Upon successful completion of this course, students will understand the development of art and/or architecture representing a specific theme or period, evaluate the contributions of individual artists and/or architects, and analyze the relationship between artistic expression, style, and cultural values.

ART 351 CERAMICS II (4)
This intermediate studio course builds upon the technical and conceptual framework of ART 231 Ceramics, with added emphasis upon personal exploration and expression. $50 Course Fee. Prereq: ART 231. (fall/spring)

ART 341 DRAWING II (4)
This intermediate studio course builds upon the technical and conceptual framework of ART 141 Drawing, with added emphasis upon personal exploration and expression. $5 Course Fee. Prereq: ART 141.

ART 342 THE HUMAN FIGURE [2-D] (4)
This course is an introduction to the visual structure of the human body and the expressive, conceptual, and communication possibilities of the human figure as artistic subject matter. $40 Course Fee.

ART 247 GLASS [3-D] (4)
This intermediate studio course builds upon the technical and conceptual framework of ART 247 Glass, with added emphasis upon personal exploration and expression. $60 Course Fee. Prereq: ART 247. (fall/spring)

ART 331 CERAMICS II (4)
This intermediate studio course builds upon the technical and conceptual framework of ART 231 Ceramics, with added emphasis upon personal exploration and expression. $50 Course Fee. Prereq: ART 231. (fall/spring)

ART 347 GLASS II (4)
This intermediate studio course builds upon the technical and conceptual framework of ART 247 Glass, with added emphasis upon personal exploration and expression. $60 Course Fee. Prereq: ART 247. (fall/spring)

ART 357 METHODS & MATERIALS OF ART (4)
Methods, materials, and current research relating to the development of effective art education programs at elementary and secondary levels. $20 Course Fee. Prereq: ED 120 (EDU 201), ED 253 (EDU 222), and TEP. (fall)

ART 381 ART MEDIA WORKSHOP (V 1-4)
This studio course introduces new or unusual techniques and explores their artistic potential for expression and communication.

ART 300 METHODS & MATERIALS OF ART (4)
Methods, materials, and current research relating to the development of effective art education programs at elementary and secondary levels. $20 Course Fee. Prereq: ED 120 (EDU 201), ED 253 (EDU 222), and TEP. (fall)

ART 377 FIBERS II (4)
This intermediate studio course builds upon the technical and conceptual framework of ART 277 Fibers, with added emphasis upon personal exploration and expression. Prereq: ART 277. The University of Montana Western Catalog 2010-2011

ART 232 ILLUSTRATION (4)
This course is an introduction to commercial illustration including professional assignments and commercial reproduction techniques. Prereq: ART 141, or ART 225, or ART 261, or ART 267.
Advanced Studio courses are designed for students who wish further experimentation and exploration in media studies beyond introductory and secondary level studio courses. Enrollment in any Advanced Studio (ART 425-470) course requires consent of instructor.

ART 425 ADVANCED STUDIO: DIGITAL MEDIA (V 1-4)
This advanced studio course in Digital Media emphasizes the achievement of technical and conceptual student-directed goals toward the creation of a body of artwork. Prereq: ART 225, ART 325, and c/i. (fall/spring)

ART 428 ADVANCED STUDIO: ILLUSTRATION (V 1-4)
This advanced studio course in Illustration emphasizes the achievement of technical and conceptual student-directed goals toward the creation of an illustration portfolio. Prereq: ART 328 and c/i. (fall/spring)

ART 431 ADVANCED STUDIO: CERAMICS (V 1-4)
This advanced studio course in Ceramics emphasizes the achievement of technical and conceptual student-directed goals toward the creation of a body of artwork. $50 Course Fee. Prereq: ART 231, ART 331, and c/i. (fall/spring)

ART 441 ADVANCED STUDIO: DRAWING (V 1-4)
This advanced studio course in Drawing emphasizes the achievement of technical and conceptual student-directed goals toward the creation of a body of artwork. Prereq: ART 141, ART 341, and c/i. (fall/spring)

ART 443 ADVANCED STUDIO: PRINTMAKING (V 1-4)
This advanced studio course in Printmaking emphasizes the achievement of technical and conceptual student-directed goals toward the creation of a body of artwork. Prereq: ART 243, ART 343, and c/i. (fall/spring)

ART 447 ADVANCED STUDIO: GLASS (V 1-4)
This advanced studio course in Glass emphasizes the achievement of technical and conceptual student-directed goals toward the creation of a body of artwork. $60 Course Fee. Prereq: ART 247, ART 347, and c/i. (fall/spring)

ART 447 ADVANCED STUDIO: PAINTING (V 1-4)
This advanced studio course in Painting emphasizes the achievement of technical and conceptual student-directed goals toward the creation of a body of artwork. Prereq: ART 261, or ART 267 and ART 367; and c/i. (fall/spring)

ART 470 ADVANCED STUDIO: PHOTOGRAPHY (V 1-4)
This advanced studio course in Photography emphasizes the achievement of technical and conceptual student-directed goals toward the creation of a body of artwork. Prereq: ART 170, ART 270, and c/i.

ART 471 ADVANCED STUDIO: SCULPTURE (V 1-4)
This advanced studio course in Sculpture emphasizes the achievement of technical and conceptual student-directed goals toward the creation of a body of artwork. $50 Course Fee. Prereq: ART 271, ART 371, and c/i. (fall/spring)

ART 474 ADVANCED STUDIO: FIBERS (V 1-4)
This advanced studio course in Fibers emphasizes the achievement of technical and conceptual student-directed goals toward the creation of a body of artwork. $50 Course Fee. Prereq: ART 277, ART 377, and c/i. (fall/spring)

ART 475 ART APPRENTICESHIP (V 3-12)
Actual work experience in the studio area selected. The number of credits received is determined by the length of the apprenticeship. (on demand)

ART 477 ADVANCED STUDIO: FIBERS (V 1-4)
This advanced studio course in Fibers emphasizes the achievement of technical and conceptual student-directed goals toward the creation of a body of artwork. Prereq: ART 277, ART 377, and c/i. (fall/spring)

ART 490 INDEPENDENT STUDY (V 1-4)
Directed research or study on an individual basis. Prereq: c/i, c/pc, and c/vc. (fall/spring)

ART 498 SENIOR PROJECT/Thesis (V 1-15)
An individual project or thesis closely associated with the student’s academic program and career goals. Project/thesis election subject to approval of project or thesis advisor. Prereq: Senior standing, c/i, c/pc, and c/vc. (fall/spring)

ART 499 SENIOR EXHIBIT & Thesis (4)
Upon completion of this course students will mount a group exhibit of their artwork, write a thesis placing their own work in an artistic, cultural, or historical context, research employment and graduate school options, and develop a portfolio of their work. Required for BA: Visual Arts Option Majors.

Note: New OCHE Common Course Numbering system rubrics and courses are displayed in italics throughout this Catalog.

ASTRONOMY (ASTR)
[New OCHE rubric effective Fall 2010]

ASTR 110 INTRODUCTION TO ASTRONOMY (4)
Pre-Fall 2010 UMw course: PHYS 240 Astronomy
An introductory course in the nature and structure of the universe including our solar system, stellar structure and evolution, galactic structure, and the large-scale structure of the universe. Day and night observations will be used along with lab projects to familiarize students with the scientific methods used by astronomers. Prereq: equivalent of MATH 007 (M 095) or higher. (fall/even-numbered years)
A prerequisite for any course with a BIO rubric is documented mathematical ability equivalent to MATH 007 Algebra/M 095 Intermediate Algebra. Ability can be demonstrated by appropriate college/university credit, ACT/SAT Math score, or UMW Math Placement Exam score.

BIO 101 INTRODUCTION TO LIFE SCIENCE (4)
See BIOB 101 Discover Biology

BIO 103 INTRODUCTION TO ETHNOBOTANY (4)
See BIOO 120 Introduction to Ethnobotany

BIO 111 BIOLOGY I (4)
See BIOB 160 Principles of Living Systems

BIO 112 BIOLOGY II (4)
See BIOB 220 General Botany

BIO 153 SURVEY OF MONTANA WILDLIFE & HABITATS (4)
See BIOO 101 Survey of Montana Wildlife & Habitats

BIO 214 GENERAL BOTANY (4)
See BIOO 220 General Botany

BIO 219 DIRECTED STUDY (V 1-5)
See BIOB 290 Undergraduate Research

BIO 222 INVASIVE SPECIES (4)
See BIOE 222 Invasive Species

BIO/MATH 233 BIOSTATISTICS (4)
See STAT 233 Biostatistics

BIO 255 CELL BIOLOGY (4)
See BIOB 260 Cellular & Molecular Biology

BIO 262 MICROBIOLOGY (4)
See BIOM 260 General Microbiology

BIO 270 CONSERVATION BIOLOGY (4)
See BIOE 250 Conservation Biology

BIO 273 ENTOMOLOGY (4)
See BIOE 262 Introduction to Entomology

BIO 290 INDEPENDENT STUDY (V 1-4)
See BIOB 292 Independent Study

BIO/MATH 331 BIOINFORMATICS (4)
See STAT 331 Bioinformatics

BIO/MATH 332 ADVANCED FIELD STATISTICS (4)
See STAT 335 Advanced Field Statistics

BIO 343 GENETICS (4)
See BIOB 375 General Genetics

BIO 355 SYSTEMATIC BOTANY (4)
See BIOB 435 Plant Systematics

BIO 371 HUMAN ANATOMY & PHYSIOLOGY (4)
Structure and function of body tissues and the circulatory, skeletal, muscular, and nervous systems. Lab included. Students without a background in high school biology may want to consider taking BIO 101 (BIOB 101) or BIO 111 (BIOB 160) before enrolling in this course. $25 Course Fee. (fall)

BIO 372 HUMAN ANATOMY & PHYSIOLOGY (4)
Structure and function of the endocrine, respiratory, digestive, urinary, and reproductive systems. Lab included. Students without a background in high school biology may want to consider taking BIO 101 (BIOB 101) or BIO 111 (BIOB 160) before enrolling in this course. Prereq: BIO 371, or c/i. (spring)

BIO 400 COOPERATIVE EDUCATION/INTERNSHIP (V 1-15)
See BIOB 498 Internship/Cooperative Education/Omnibus

BIO 409 SEMINAR (V 1-3)
See BIOB 494 Seminar/Workshop

BIO 419 DIRECTED STUDY (V 1-5)
See BIOB 490 Undergraduate Research

BIO 425 MOLECULAR BIOLOGY (4)
See BIOB 425 Advanced Cell & Molecular Biology

BIO 450 EVOLUTION (4)
See BIOB 420 Evolution

BIO 471 WILDLIFE ECOLOGY & MANAGEMENT (4)
This course will provide students with a foundation in the science of wildlife biology. The theory portions of the course will cover the fundamentals of wildlife science including the following: wildlife census techniques, wildlife population dynamics, experimental design of field studies, data collection and analysis, decimating factors (predation, hunting, disease, accidents, and starvation), welfare factors (forage, water, cover, and special factors), wildlife administration and law, habitat management and alteration (farm and rangelands, forests, national parks, wildlife refuges, and urban environments), exotic species, endangered species management of game and non-game species, and the economies of wildlife. The field portion of the course will include projects designed by students to engage them in looking at the realities, the difficulties, and sometimes the thrill of field research in wildlife biology. An additional and significant goal of the course will be to expose students to the primary wildlife literature. Students will be assessed based on written exams, data analyses, the ability to function as a team to develop effective project proposals and work in field/laboratory settings collecting and analyzing data, demonstrations of written and oral communications skill in chapter discussions and group project presentations, and the quality of field notebooks. $35 Course Fee. Prereq: BIO 112 (BIOB 170), MATH 131 (STAT 121), and either MATH 232 (STAT 217) or MATH 233 (STAT 233); or c/i. (fall/even-numbered years)

BIO 473 ORNITHOLOGY (4)
See BIOO 470 Ornithology

BIO 475 MAMMALOGY (4)
See BIOO 475 Mammalogy

BIO 477 ECOLOGY (4)
See BIOE 370 General Ecology

BIO 479 VERTEBRATE ZOOLOGY (4)
See BIOO 450 Vertebrate Zoology
BIO 101 DISCOVER BIOLOGY (4)
Pre-Fall 2010 UMW course: BIO 101 Introduction to Life Science
Unifying features of living organisms; diversity of life forms; history and relevance of the study of biology within human society. This course is intended for non-science majors. Lab included. $20 Course Fee.
Prereq: equivalent of MATH 007 (M 095) or higher.

BIO 160 PRINCIPLES OF LIVING SYSTEMS (4)
Pre-Fall 2010 UMW course: BIO 111 Biology I
This course is intended for science majors. It is designed to help students understand and apply major concepts in molecular and cellular biology including: matter and energy, atomic structure, chemical reactions and chemical bonds, common organic molecules, cell structure and function (prokaryotic and eukaryotic cells), enzymes, major biochemical pathways (photosynthesis and cellular respiration), nucleic acids (DNA and RNA), cell division (mitosis and meiosis), Mendelian genetics, exchanging materials within the body, and control mechanisms within the body. Students will also examine the scientific method (controlled experiments, hypothesis testing, etc.). Lab included. $30 Course Fee.
Prereq: equivalent of MATH 007 (M 095) or higher, or c/i. (fall)

BIO 170 PRINCIPLES OF BIOLOGICAL DIVERSITY (4)
Pre-Fall 2010 UMW course: BIO 112 Biology II
This course is intended for science majors. It is designed to help students understand and apply major concepts in organismal biology including the diversity, evolution, and ecology of organisms. The origin of life and the evolution of cells, classification and evolution of organisms, major Domains and Kingdoms of life, natural selection and evolution, species diversity, ecosystem organization and energy flow, community interactions, population ecology, and behavioral ecology will be discussed. Lab included. $30 Course Fee. Prereq: equivalent of MATH 007 (M 095) or higher, or c/i. Recommend taking BIO 111 (BIOB 160) prior to this course. (spring)

BIO 255 CELLULAR & MOLECULAR BIOLOGY (4)
Pre-Fall 2010 UMW course: BIO 255 Cell Biology
This experimentally-based course investigates a wide breadth of topics in current cell biology in detail. Much attention is given to the structure and function of cells and cellular macromolecules, biological membranes, cellular metabolism, molecular biology, enzymes, and the cell cycle. The laboratory portions of this course will use novel projects to introduce students to many techniques in current cell biology. Some of these include cell fractionation, protein localization, western blot analysis, centrifugation techniques, and enzyme activity assays. Lab included. This course will meet for an additional 3-hour session one day each week during weeks 1 thru 3 of the block. $30 Course Fee. Prereq: BIO 111 (BIOB 160), or c/i. (spring)

BIO 490 UNDERGRADUATE RESEARCH (V 1-5)
Pre-Fall 2010 UMW course: BIO 219 Directed Study
Selected topics under faculty supervision. Prereq: c/i, c/pc, and c/vc. (fall/spring)

BIO 292 INDEPENDENT STUDY (V 1-4)
Pre-Fall 2010 UMW course: BIO 290 Independent Study
Directed research or study on an individual basis. Prereq: c/i, c/pc, and c/vc. (fall/spring)

BIO 375 GENERAL GENETICS (4)
Pre-Fall 2010 UMW course: BIO 343 Genetics
This course focuses on all major aspects of genetics from classical Mendelian inheritance to molecular genetics. Students will become familiar with mechanisms of inheritance and explore how inheritance of genes influences all aspects of life. A portion of the course will focus on human genetics and the influences of genetics on human traits. The laboratory portion of the course will explore genetic principles using yeast, bacteria, and multicellular organisms as well as mutant screens, molecular genetic tools, computer databases, and genomic tools. Lab included. This course will meet for an additional 3-hour session one day each week during weeks 1 thru 3 of the block. $35 Course Fee. Prereq: BIO 255 (BIOB 260) and MATH 131 (STAT 121), or c/i. (spring)

BIO 420 EVOLUTION (4)
Pre-Fall 2010 UMW course: BIO 450 Evolution
A survey of evolutionary theory from its philosophical origins to its present day synthesis. Detailed examination of the mechanisms of natural selection, adaptation, and speciation, as well as the evidence which chronicles the fact of organic evolution through time will comprise the main topics of this course. Lab included. $30 Course Fee. Prereq: BIO 343 (BIOB 375), or c/i. (spring/odd-numbered years)

BIO 425 ADVANCED CELL & MOLECULAR BIOLOGY (4)
Pre-Fall 2010 UMW course: BIO 425 Molecular Biology
This intense, inquiry-based course will explore the mechanisms underlying the central dogma of molecular biology in close detail. Special attention will be given to gene regulation at the transcriptional, translational, and post-translational levels as well as to mechanisms of signal transduction. In addition, a unit of the course will discuss the field of genomics as it relates to identifying and understanding specific regions of DNA sequence. The laboratory portion of this course will allow students to use their own research projects to learn techniques such as DNA isolation, gene cloning, agarose gel electrophoresis, PCR, restriction enzyme analysis, and many more. Lab included. This course will meet for an additional 3-hour session one day each week during weeks 1 thru 3 of the block. $35 Course Fee. Prereq: BIO 255 (BIOB 260) and Junior standing, or c/i; CHEM 331 (CHMY 321) recommended. (spring/even-numbered years)

BIO 490 UNDERGRADUATE RESEARCH (V 1-5)
Pre-Fall 2010 UMW course: BIO 419 Directed Study
Selected topics under faculty supervision. Prereq: c/i, c/pc, and c/vc. (on demand)

BIO 492 INDEPENDENT STUDY (V 1–4)
Pre-Fall 2010 UMW course: BIO 490 Independent Study
Directed research or study on an individual basis. Prereq: c/i, c/pc, and c/vc. (fall/spring)
BIOE 222 INVASIVE SPECIES (4)
Pre-Fall 2010 UMW course: BIO 222 Invasive Species
Example animal and plant invasions, both local and around the world, will be used to examine the biological (including ecological and evolutionary) and social issues associated with the growing problem of invasive alien species. Through preparation for class discussion and position papers, students will acquire an in-depth understanding of how politics, economics, and ethics have intertwined to result in continuing environmental degradation by invasives. Through field and/or lab exercises students will acquire practical knowledge of assessment and control of invasive species, as well as the methods used to gather, validate, and interpret biological data in general. $25 Course Fee. Prereq: c/i (spring/odd-numbered years)

BIOE 250 CONSERVATION BIOLOGY (4)
Pre-Fall 2010 UMW course: BIO 270 Conservation Biology
The impact of deterministic (nonrandom) and stochastic processes (environmental, catastrophic, genetic, and demographic) on small populations (i.e., threatened and endangered species) will be examined. Discussions cover habitat and population fragmentation, corridors, biodiversity and its measurement, endangered species policy and law, and case studies of extinction; for the latter, ultimate and proximate causal factors of extinction will be discussed. Students without a background in high school biology may want to consider taking BIO 101 (BIOB 101) before enrolling in this course. $20 Course Fee.

BIO 270 CONSERVATION BIOLOGY (4)
Pre-Fall 2010 UMW course: BIO 270 Conservation Biology
This course will introduce students to the study and scientific practice of ecology—the relationship between organisms and their environment. Students will consider ecologically interesting questions and develop hypotheses that they will then test using a combination of field studies, laboratory experiments, and statistical analyses. Includes individual, population, community, and ecosystem-level processes (e.g., natural history, population growth and dynamics, life history, competition, predation, diversity, community organization, nutrient cycling, energy flow, and succession). Students will be assessed based on written exams, demonstrations of written and oral communications skill in chapter reviews and data analyses, the ability to function as a team to develop an effective grant pre-proposal, and the quality of their field notebook. $40 Course Fee. Prereq: BIO 112 (BIOB 170), MATH 131 (STAT 121), and either MATH 232 (STAT 217) or MATH 233 (STAT 233); or c/i. (fall)

BIO 477 ECOLOGY (4)
This course will provide students an understanding of the importance, classification, physical structure, and biological communities unique to wetland ecosystems. Field and laboratory activities include the observation, collection, preservation and/or examination of wetland soils, water, algae, plants, invertebrates, fishes, amphibians, reptiles, birds, and mammals. Wetland management and law, natural versus designed wetlands, wetland ecosystem goods and services, and the biogeography of wetlands around the world will be discussed. Students will be assessed based on written exams, a lab and field practical, a student-produced wetland management paper, written reviews of journal articles, and demonstrations of oral communication skills in class discussions and project presentations. Prereq: CHEM 131 (CHMY 143), CHEM 132 (CHMY 143), and either BIO 111 (BIOB 160) or BIO 112 (BIOB 170); or c/i. (spring/even-numbered years)
BIOO 262 INTRODUCTION TO BIOO 220 GENERAL BOTANY (4)

BIOO 120 INTRODUCTION TO ETHNOBOTANY (4)

BIOO 273 Entomology

BIOO 477 MAMMALOGY (4)

BIOO 475 ORNITHOLOGY (4)

BIOM 260 GENERAL MICROBIOLOGY (4)

Pre-Fall 2010 UMW course: BIO 262 Microbiology

BIOM 427 GENERAL PARASITOLOGY (4)

BIOO 475 MAMMALOGY

Pre-Fall 2010 UMW course: BIO 255 (BIOB 260) and BIO 477 (BIOE 370); or c/i. (spring/odd-numbered years)

Note: New OCHE Common Course Numbering system rubrics and courses are displayed in italics throughout this Catalog.

BIOLOGY - MICRO (BIOM)
(New OCHE rubric effective Fall 2010)

A prerequisite for any course with a BIOM rubric is documented mathematical ability equivalent to MATH 007 Algebra/M 095 Intermediate Algebra. Ability can be demonstrated by appropriate college/university credit, ACT/SAT Math score, or UMW Math Placement Exam score.

BIOM 260 GENERAL MICROBIOLOGY (4)

Pre-Fall 2010 UMW course: BIO 262 Microbiology

This course focuses on the structure and biology of microorganisms including Archaea, bacteria, fungi, algae, protozoans, and viruses. A partial list of lecture topics includes microbial growth and nutrition, metabolism, microscopy, microbial diseases, and food microbiology. The laboratory investigates many aspects of microbiology including microbial diversity, ecology, water sampling, antibiotic susceptibility, enrichment cultures, as well as more exciting topics. Lab included. $35 Course Fee. Prereq: BIO 255 (BIOB 260). (spring)

BIOO 101 SURVEY OF MONTANA WILDLIFE & HABITATS (4)

Pre-Fall 2010 UMW course: BIO 153 Survey of Montana Wildlife & Habitats

This course is a lower-division survey course of the wildlife species found in Montana. The course intends to introduce students to Montana wildlife, their habitats, field sign and other identification features, vulnerabilities, behavior, and rare and endangered species. (spring)

BIOO 103 INTRODUCTION TO ETHNOBOTANY

Pre-Fall 2010 UMW course: BIO 103 Introduction to Ethnobotany

Introduction into the discipline of ethnobotany focusing on the role of plants in culture. Field trips to parks and visits with people active in the use of plants will provide opportunities for hands-on experience with techniques and methods used by field ethnobotanists. $35 Course Fee. (fall)

BIOO 214 General Botany

This experientially based course will delve into the study of conifers and flowering plants, with emphasis on anatomy, morphology, taxonomy, ethnobotanical uses and evolution. The principles of genetics, ecology, and physiology of various example species will be examined. Assessment will be based on exams, quizzes, case studies, and the development of an ongoing research project. $35 Course Fee. Prereq: BIO 111 (BIOB 160).

BIOO 220 GENERAL BOTANY (4)

Pre-Fall 2010 UMW course: BIO 214 General Botany

This experientially based course will delve into the study of conifers and flowering plants, with emphasis on anatomy, morphology, taxonomy, ethnobotanical uses and evolution. The principles of genetics, ecology, and physiology of various example species will be examined. Assessment will be based on exams, quizzes, case studies, and the development of an ongoing research project. $35 Course Fee. Prereq: BIO 111 (BIOB 160).

BIOO 262 INTRODUCTION TO ENTOMOLOGY (4)

Pre-Fall 2010 UMW course: BIO 273 Entomology

Taxonomy, morphology, behavior, and ecology of representative families of insects. Collection required; students should consult with instructor prior to summer. Lab included. $25 Course Fee. Prereq: BIO 112 (BIOB 170), or c/i. (fall/odd-numbered years)

BIOO 340 BIOLOGY & MANAGEMENT OF FISHES (4)

This course will expose students to the diversity, adaptations, and ecology of fishes. Field activities will focus on the collection and analysis of data on fish populations and communities. Professional fisheries biologists will expose students to the theory and practice of fisheries management. Laboratory activities include the microscopic examination of the internal and external anatomy of preserved and collected whole fish specimens, along with the physiology and behavior of live fish. A field-based team project that will result in a written report and oral presentation. Students will be assessed based on written exams, data analyses, the ability to function as a team to develop effective project proposals and work in field/laboratory settings collecting and analyzing data, demonstrations of written and oral communication skills in chapter discussions and group project demonstrations, and the quality of field notebooks. Prereq: BIO 112 (BIOB 170), MATH 131 (STAT 121), and either MATH 232 (STAT 217) or MATH 233 (STAT 233); or c/i. (fall/odd-numbered years)

BIOO 435 PLANT SYSTEMATICS (4)

Pre-Fall 2010 UMW course: BIO 355 Systematic Botany

Techniques for studying, teaching, and interpreting vascular plants, use of taxonomic keys, principles, and rules of nomenclature, and consideration of the taxonomic literature. Includes a botanic and/or interpretive project. $55 Course Fee. Prereq: BIO 214 (BIOB 220). (spring)

BIOO 450 VERTEBRATE ZOOLOGY (4)

Pre-Fall 2010 UMW course: BIO 479 Vertebrate Zoology

Taxonomy, morphology, physiology, ecology, behavior, and evolution of representative vertebrate groups. Students will conduct field and laboratory projects and produce written analyses/reports. Lab included. $10 Course Fee. Prereq: BIO 112 (BIOB 170). (spring/odd-numbered years)

BIOO 470 ORNITHOLOGY (4)

Pre-Fall 2010 UMW course: BIO 473 Ornithology

Taxonomy, morphology, physiology, ecology, behavior, and evolution of birds. Labs include study of anatomy and techniques of field identification. Students will conduct field and laboratory projects and produce written analyses/reports. $40 Course Fee. Prereq: BIO 112 (BIOB 170). (spring/odd-numbered years)

BIOO 475 MAMMALOGY (4)

Pre-Fall 2010 UMW course: BIO 475 Mammalogy

Taxonomy, morphology, physiology, ecology, behavior, and evolution of mammals. Field and lab study included. Students will conduct field and/or laboratory projects and produce written analyses/reports. $40 Course Fee. Prereq: BIO 112 (BIOB 170). (fall/odd-numbered years)
BUS 121 BEGINNING KEYBOARDING (1)
Presentation of alphabetic and numeric keyboard, speed and accuracy development on microcomputers, and the basics of using word processing software. (on demand)

BUS 200 COOPERATIVE EDUCATION (V 1-12)
An elective for those business students who wish to incorporate within their academic education an appropriate industry work experience. No more than 6 credits in cooperative education will qualify as business electives. $5/Credit Course Fee. Prereq: Sophomore standing and c/i. (fall/spring)

BUS 201 SMALL BUSINESS DEVELOPMENT (3)
Students will be introduced to startup ventures and how to make them unique. They will explore the legal issues of business startup or expansion, and demonstrate an understanding of the marketing, finance, and management skills necessary for success by creating a business plan. Activities will include some team-based projects. (spring)

BUS 202 CUSTOMER SERVICE (3)
Emphasizes the development of good customer service policies and strategies, training personnel for customer service program implementation, evaluation of service procedures, and resolving customer problems and complaints. Customs and manners of foreign cultures will also be addressed. (fall/spring/summer)

BUS 203 MULTICULTURAL LEADERSHIP (4)
This course covers an in-depth understanding of national and global multiculturalism. The course concentrates on both theory and concepts of leadership and their application in resolving economic, ethical, religious, social, political, and scientific conflicts arising from differentiated frameworks used by various cultures. Topics include Multicultural Mentorship—experiential learning to develop individual vision and foster teamwork, multiculturalism and its historical and current dimensions nationally and globally. The course will include exercises, project work, field studies, web-based research reports, and case studies of real life cultural experiences. The workshop approach focuses on building conflict resolution skills needed to improve the workplace relationships by understanding and applying the concepts of leadership. In practice, students will learn both concepts and techniques of communications, mediation, win-lose and win-win negotiations, and Alternate Dispute Resolution procedures. An added feature of this course is learning creative problem-solving by developing sensitivity to Native American, Hispanic, black American, white American, as well as global cultures including Asia (China, Japan, Korea, Singapore, Taiwan), Latin America, European Union, Middle East, and Africa. Prereq: c/i.

BUS 210 CAREER PLANNING (2)
Taken before or concurrent with the associate degree internship, this course is designed to ease transition into professional field experience and to prepare for career entry following graduation. Students will create resumes and application letters, practice interview techniques, learn job search strategies, and write goals and objectives. They will research contemporary issues in the workplace, use the World Wide Web as a job search tool, and prepare a career portfolio. Students will be evaluated by a lifetime career database, a career portfolio, a practice interview, and participation in class activities. Prereq: Sophomore standing. (fall/spring)

BUS 217 BUSINESS & ELECTRONIC COMMUNICATIONS (4)
As the first required course for all business majors, it establishes the communications foundation for the degree program. Students will learn to write measurable objectives, how to analyze and use case studies, practice writing, speaking, and listening skills through multiple applications, and how to work with a team. The dynamic course is adjusted each term to help meet the expressed objectives of the students. Each student will leave the course with a portfolio showcasing their writing skills. $15 Course Fee. Prereq: ENG 101 or ENG 102 (WRIT 101). (fall/spring)

BUS 219 DIRECTED STUDY (V 1-5)
Selected topics under faculty supervision. Prereq: c/i, c/pc, and c/vc. (on demand)

BUS 241 FINANCIAL ACCOUNTING (3)
See ACTG 201 Principles of Financial Accounting

BUS 242 MANAGERIAL ACCOUNTING (3)
See ACTG 202 Principles of Managerial Accounting

BUS 253 BUSINESS RESEARCH & STATISTICAL ANALYSIS (4)
This course is designed to develop an understanding of the application of probability and statistics in business and to develop a familiarity with the basic concepts of descriptive and inferential statistics. Students will be acquainted and equipped with both the qualitative and quantitative methodological and statistical issues involved in conducting research in business. Through course lectures, research projects, and class assignments students will learn the basics of a variety of qualitative and quantitative research methods (as well as statistical methods), how they are used, and in what situations they are most useful. Prereq: MATH 131 (STAT 121), or c/i.

BUS 280 BUSINESS LAW (4)
Introduction to the legal process and concepts associated with business in domestic and international transactions. Topics discussed include contracts, UCC, equity, torts, criminal, constitutional law, business organizations, real estate, and estate planning. (fall/spring)

BUS 281 BUSINESS LAW I (3)
Introduction to the legal process and concepts associated with business in domestic and international transactions. Topics discussed: Contracts, UCC, Equity, Torts, Criminal, Constitutional, and Employment Law. Prereq: Sophomore standing.

BUS 282 BUSINESS LAW II (3)

BUS 290 INDEPENDENT STUDY (V 1-4)
Directed research or study on an individual basis. Prereq: c/i, c/pc, and c/vc. (fall/spring)

BUS 301 ENTREPRENEURSHIP (4)
Entrepreneurial ability is an intangible and very powerful tool for small business owners and managers if they can learn to recognize and manage it, both in themselves as well as in their employees. This course focuses on applying entrepreneurship theory to recognition, hiring, motivation, management, and retention of entrepreneurial employees in order to grow a small business. Prereq: BUS 325 and Junior standing. (fall)

BUS 304 LEADERSHIP (4)
The course covers theories, principles, and techniques of effective leadership with an emphasis on the following concepts and skills: strategy formulation, visioning, ethics-building, interpersonal relations (internal and external), group dynamics, team communications, cross-cultural and
global issues in leadership; political skills required by effective leaders; change master; negotiation, mediation, stress management, and problem-solving. The course will cover experiential learning exercises, real life case analysis, comparative analysis of political and business leaders, and analysis and presentation of real life current events related to leadership. A detailed field-based project report and case presentations are required. Prereq: c/i. (fall/spring/summer)

BUS 311 INCOME TAX ACCOUNTING (3)
See ACTG 401 Principles of Federal Taxation-Individuals

BUS 317 ADVANCED BUSINESS COMMUNICATIONS (4)
Students will learn and integrate fundamental principles and inter-relationships within the context of real-world business communication issues. The course emphasizes an understanding of the important methods, terms, theories, and findings in the field of Management Communications. The course will cover technological communications and communicating in intercultural and international contexts. The course will provide experiential instruction through active participation in an interactive classroom environment. The teaching methodology will focus on motivating students in gaining impact assessment of their communications, using a variety of instructional, assessment, and foundation techniques. Assessment will be through written exams, evaluation of field-based and classroom assignments, and presentations. Prereq: BUS 217, or c/i. (fall)

BUS 325 PRINCIPLES & PRACTICES OF MANAGEMENT (3)
This course covers fundamentals of planning, organizing, directing, and controlling a business organization. Theories, techniques, and practices used in formulating strategies, policies, procedures, and goals of a business are covered. The course will use a multiple set of teaching tools to provide experiential learning including case studies, hands-on field-based real life examples of companies, and to teach students how to manage in ways that deliver results—results that customers want and also enable companies to gain the competitive edge. A comprehensive research-based project report is required. $10 Course Fee. Prereq: ECON 250 (ECNS 203), or ECON 251 (ECNS 202), or ECON 252 (ECNS 201); or c/i. (fall/spring)

BUS 326 ORGANIZATIONAL BEHAVIOR (3)
This course is an investigation of individual, group, and organizational behavior in the multicultural environment. The course will cover theory, research, and selected applications on topics such as organizational structure, technology, communication, ethics and social responsibility, group dynamics, and change and development. Throughout this course, issues and challenges of managing organizations are discussed and illustrated with real-world examples to help students understand the groups and organizations to which they currently belong and of which they will become a part in their later careers. Prereq: BUS 325 and Junior standing.

BUS 327 RISK MANAGEMENT & INSURANCE (3)
Analysis and treatment of property and liability risks facing firms and consumers. Major emphasis is on recognizing and managing these risks and on utilizing insurance as a financial device. (on demand)

BUS 329 HUMAN RESOURCE MANAGEMENT (3)
The course covers strategic human resource planning, job analysis, recruitment and selection, evaluating performance, compensation systems and governmental regulations, behavioral tools and techniques dealing with personnel problems, employee stress management, technostress and organizational burnout, and labor-management relations. The course also covers contemporary issues in human resource management including global human resource management and analysis and evaluation of collective bargaining issues. Prereq: BUS 325, or c/i. (spring)

BUS 341 BUSINESS FINANCE (3)
This course covers elements of the finance function of the organization as well as the financial analysis of decisions including working capital management, acquisition of capital, capital budgeting, cost of capital, and theories of valuation. $10 Course Fee. Prereq: BUS 242 (ACTG 202), or c/i. (fall/spring)

BUS 347 PRINCIPLES & PRACTICES OF MARKETING (3)
This course covers an in-depth understanding of marketing concepts and tools. Topics include strategic marketing planning, product and pricing policies, distribution channels, promotion, customization, marketing research, segmenting and targeting markets, services marketing, and international marketing. Using experiential learning techniques the student will gain hands-on marketing experience through case studies, presentations, and field-based audits of marketing effectiveness of selected companies. $10 Course Fee. Prereq: ECON 250 (ECNS 203), or ECON 251 (ECNS 202), or ECON 252 (ECNS 201). (fall/spring)

BUS 349 CONSUMER BEHAVIOR (3)
This course introduces students to internal and external factors that influence buyer behavior in a theoretical and practical manner by considering the disciplines of economics, psychology, and sociology. The course focuses on individual consumer variables such as perception, motivation, learning, personality, and attitude, and group variables such as social class, family, and status symbolism, as well as the buying decisions consumers and groups make and the culture they live in. Throughout the course a special emphasis is placed on the practical application of this knowledge. Prereq: BUS 347 and Junior standing.

BUS 351 METHODS & MATERIALS OF BUSINESS THEORY SUBJECTS (2)
Methods of lesson and unit planning and presentation including student assessment, test design, evaluation, audio/visual technology, and curriculum planning for general business, economics, business law, accounting, career planning, business communications, and business mathematics. Participation in microteaching experiences is required. $35 Course Fee. Prereq: TEP and Junior standing. (fall)

BUS 355 OPERATIONS MANAGEMENT (3)
This course introduces students to the quantitative techniques of operations management used by management in business decision-making. Topics include the study and application of goods and services, chain management, performance, measurement systems, quantitative decision theories, quality concepts, inventory management and project management, and supporting control theories. Course applications include some team-based projects. Prereq: MATH 232 (STAT 217), or BUS 253.

BUS 364 CONTEMPORARY ISSUES IN BUSINESS ETHICS (4)
This course covers the significance of contemporary ethical issues affecting business including the conceptual and practical understanding of ethical decision-making. Topics include social and legal value in business ethics, development of an effective ethics program, conflict resolution, corporate culture, and the role of leadership in managing business ethics. The course covers the legal framework in managing corporate governance as required by the Sarbanes-Oxley Act in implementing and auditing an effective ethics program. The course provides hands-on training in business ethics in a global economy. The course will encourage students to develop their conceptual skills from focused facilitated seminars and hands-on field study oriented-projects. Prereq: Junior standing, or c/i. (fall)

BUS 371 COST ACCOUNTING (3)
See ACTG 410 Cost/Management Accounting I

BUS 377 INVESTMENTS (4)
Stocks, bonds, and other investment vehicles and corresponding market institutions. Topics include the institutional structure of the market, current issues in financial markets, investment analysis, portfolio analysis, and modern portfolio theory. Students will participate in a market trading simulation. Prereq: BUS 242 (ACTG 202), (spring)
BUS 400 COOPERATIVE EDUCATION/INTERNSHIP (V 1-12)
Incorporation of an appropriate work experience into the student’s academic preparation. Students will develop a learning contract in conjunction with their employer, maintain a portfolio of their work experience, and make a final presentation of their internship to the business faculty as part of their exit interview. $5/Credit Course Fee. Prereq: Senior standing and c/i. (fall/spring/summer)

BUS 401 MANAGING PERSONAL & ORGANIZATIONAL STRESS (4)
The course will provide an in-depth analysis of contemporary stressors, concepts of stress, distress, technostress, job burnout, and technoburnout. Topics include factors leading to personal, social, and organizational stressors in both private and public sector organizations. Topics include practical techniques and tools in managing personal stress as well as occupational stress, physiological, psychological, and organizational consequences of stress and burnout; prevention and management strategies in a variety of cultural and global settings. The course will provide implications for culture, leadership, employee productivity, and organizational change. Emphasis will be placed on both conceptual and experiential aspects by using role-play and stress coping exercises. Includes project report, presentations, and internet and field-based research. Prereq: Junior standing, or c/i.

BUS 402 ORGANIZATION & ADMINISTRATION OF BUSINESS EDUCATION PROGRAMS (1)
Organization and operation of distributive and business education programs at the secondary and community college levels. Prereq: c/i. (on demand)

BUS 403 CURRICULUM CONSTRUCTION IN BUSINESS EDUCATION & INDUSTRIAL TECHNOLOGY (2)
Principles of selecting, evaluating, and presenting curriculum materials for business education and industrial technology. Prereq: c/i. (on demand)

BUS 409 SEMINAR (V 1-3)
Selected topics of interest. Prereq: c/i and c/pc. (on demand)

BUS 410 CAREER PLANNING (2)
Taken before or concurrent with the bachelor degree internship, this course is designed to ease transition into professional field experience and to prepare for career entry following graduation. Students will create resumes and application letters, practice interview techniques, learn job search strategies, and write goals and objectives. They will research contemporary issues in the workplace, use the World Wide Web as a job search tool, and prepare a career portfolio. Students will be evaluated by a lifetime career database, a career portfolio, a practice interview, short reports, and participation in class activities. Prereq: Junior standing.

BUS 419 DIRECTED STUDY (V 1-5)
Selected topics under faculty supervision. Prereq: c/i, c/pc, and c/vc. (fall/spring)

BUS 426 STRATEGIC MANAGEMENT (3)
The course will deal with theory and practice of strategic management covering strategy formulation, implementation, and evaluation in various environmental contexts. In today’s hypercompetitive marketplace, future managers and leaders must learn to formulate and adapt strategy to become powerful competitors to survive. This course will analyze ingredients of a good strategy and effective methods for implementing that strategy. Strategic Management prepares students to anticipate and respond to the accelerating pace of global competition and technological innovation. This course will benefit future leaders in providing tools to formulate and evaluate new competitive strategies, determine how to lay the groundwork for change, and execute their action plans. Prereq: Junior standing, or c/i. (fall)

BUS 461 SMALL BUSINESS MANAGEMENT & STRATEGIC PLANNING (3)
Analysis of the operations of small businesses and the roles they play in the economy is the focus of this capstone course, which is taken prior to the internship experience. Using a strategic planning context, the following topics are covered: strategic planning, marketing, finance, production, management, legal issues, and technology. Activities, many of which involve teams, include case studies, shadowing, consulting, guest speakers, and simulations. A national standardized exam is administered at the conclusion of this course. Prereq: Completion of Business Administration core and Senior standing. (fall)

BUS 466 INTERNATIONAL MANAGEMENT (4)
The transformational forces of globalization and technology are radically challenging competitive strategies, business operations, and organization-structural entities as they are known today. Montana’s economy is intimately tied to global business trends, hence this course is intended to provide a unique learning opportunity that is designed to broaden individual horizons, break parochial perspectives, and challenge conventional wisdom. The course will cover theory and practice of international management in a global environment, a firm grasp of Internet-based workgroup capabilities, an in-depth comprehension of global business challenges and opportunities, deeper insights into critical management issues, and greater cross-cultural understanding—in essence, a management tool for practical application for UMW graduates. This course will challenge participants to realize their full leadership potential and become outstanding future managers in the global business environment. Prereq: Junior standing. (fall)

BUS 467 TEAMWORK & ORGANIZATIONAL BEHAVIOR (4)
This course covers an understanding of organizational behavior concepts and tools as applied to the efficient and effective functioning of contemporary organizations in a rapidly changing global environment. The course will provide an in-depth understanding of team formation, team development, team leadership, diversity, and strategic organizational change. The course focuses on the process of organization development as a foundation for teamwork, covering diagnosis, analysis, design interventions, management and evaluation of change. A variety of strategic team leadership and behavioral strategies are covered with special reference to recent trends such as strategic alliances, restructuring, mergers and acquisitions, and outsourcing. This course will be centered around creating a learning environment and encourages students to develop their skills from focused facilitated discussion and hands-on field study-oriented projects. Prereq: BUS 325 and Junior standing, or c/i. (fall)

BUS 468 STRATEGIC MANAGEMENT OF E-COMMERCE (4)
This course provides a good understanding of the evolving Internet technologies and e-commerce models and explores the business and marketing implications of these new developments. It explores the architectures, technologies, tools, business, and marketing implications of emergence of electronic commerce in the Internet economy. This course will lead students to identify and examine the principles, concepts, and management strategies needed for designing and analyzing the high-performance, scalable, and secure e-commerce systems. Students will be required to participate in class seminars and do assessment presentations of selected e-commerce websites. The course will also cover distinctions between e-business and e-commerce, integration of offline and online marketing systems, and strategic, ethical, and ergonomic issues. A significant research-based project report is required. Prereq: BUS 347 and Junior standing. (spring)

BUS 469 LABOR-MANAGEMENT RELATIONS (4)
This course provides an in-depth understanding and practice of collective bargaining behaviors in both private and public sector organizations. The course is both historical and analytical in its approach and examines relationships between management and organized groups of employees, including labor unions and professional associations, with analysis and assessment of collective bargaining issues, negotiation styles and methods, factors contributing to conflict, and dispute resolution methods.
including mediation and arbitration. The course covers an analysis of selected international labor relations systems. The course will be centered around creating a lab environment that provides hands-on experiential skills, supplemented by facilitated discussion and field study-oriented projects. Prereq: Junior standing, and either BUS 325 or BUS 329, or c/i. (spring)

**BUS 488 FOUNDATIONS OF VOCATIONAL EDUCATION (2)**
Provides an understanding of the history of vocational education and philosophy, relates the philosophy of vocational education to the goals and methods used in business and industrial technology instruction, and presents strategies for developing partnerships with business/industry.

**CHEM 355 PHYSICAL CHEMISTRY (4)**
See CHMY 361 Elements of Physical Chemistry

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**BUS 490 INDEPENDENT STUDY (V 1-4)**
Directed research or study on an individual basis. Prereq: c/i, c/pc, and c/vc. (fall/spring)

**BUS 498 SENIOR PROJECT/THESIS (V 1-15)**
An individual project or thesis closely associated with the student’s academic program and career goals. Project/thesis election is subject to approval by project or thesis advisor. Students will make a final presentation of their senior project/thesis to the business faculty as part of their exit interview. $5 Course Fee. Prereq: Senior standing, c/i, c/pc, and c/vc. (fall/spring)

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**CHEMISTRY (CHEM)**
[New OCHE rubric effective Fall 2009, see CHEMISTRY (CHMY)]

A prerequisite for any course with a CHEM rubric is documented mathematical ability equivalent to MATH 007 Algebra/M 095 Intermediate Algebra. Ability can be demonstrated by appropriate college credit, ACT/SAT Math score, or UMW Math Placement Exam score.

**CHEM 101 INTRODUCTION TO CHEMISTRY (4)**
See CHMY 121 Introduction to General Chemistry

**CHEM 131 GENERAL CHEMISTRY (4)**
See CHMY 141 College Chemistry I

**CHEM 132 GENERAL CHEMISTRY (4)**
See CHMY 143 College Chemistry II

**CHEM 219 DIRECTED STUDY (V 1-5)**
Selected topics under faculty supervision. Prereq: c/i, c/pc, and c/vc. (fall/spring)

**CHEM 251 QUANTITATIVE ANALYSIS (4)**
See CHMY 311 Analytical Chemistry-Quantitative Analysis

**CHEM 290 INDEPENDENT STUDY (V 1-4)**
See CHMY 292 Independent Study

**CHEM 331 ORGANIC CHEMISTRY (4)**
See CHMY 321 Organic Chemistry I

**CHEM 332 ORGANIC CHEMISTRY (4)**
See CHMY 323 Organic Chemistry II

**CHEM 355 PHYSICAL CHEMISTRY (4)**
See CHMY 361 Elements of Physical Chemistry

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**CHEM 400 COOPERATIVE EDUCATION/INTERNSHIP (V 1-15)**
See CHMY 498 Internship/Cooperative Education/Omnibus

**CHEM 419 DIRECTED STUDY (V 1-5)**
Selected topics under faculty supervision. Prereq: c/i, c/pc, and c/vc. (on demand)

**CHEM/GEOL 431 ENVIRONMENTAL GEOCHEMISTRY (4)**
See CHMY/GEOL 431 Environmental Geochemistry

**CHEM 441 BIOCHEMISTRY (4)**
Biochemistry is the chemistry of biological molecules and processes. Therefore, this course will focus on the chemistry of common biological macromolecules, such as the structure and function of proteins, lipids, nucleic acids, and carbohydrates. In addition, attention will be given to enzymatic processes, metabolic pathways, and energetics. Problem-solving approaches and the current biochemistry literature will often be used to address these topics. Lab included. This course will meet for an additional 3-hour session one day each week during weeks 1 thru 3 of the block. $35 Course Fee. Prereq: CHEM 332 (CHMY 333) and BIO 255 (BIOB 260) grade C- or higher; or c/i. (spring/odd-numbered years)

**CHEM 490 INDEPENDENT STUDY (V 1-4)**
See CHMY 492 Independent Study

**CHEM 498 SENIOR PROJECT/THESIS (V 1-15)**
See CHMY 499 Senior Project/Thesis

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**CHEMISTRY (CHMY)**
[For OCHE equivalent courses effective Fall 2009, see CHEMISTRY (CHMY)]

A prerequisite for any course with a CHMY rubric is documented mathematical ability equivalent to MATH 007 Algebra/M 095 Intermediate Algebra. Ability can be demonstrated by appropriate college credit, ACT/SAT Math score, or UMW Math Placement Exam score.

**CHMY 121 INTRODUCTION TO CHEMISTRY (4)**
Pre-Fall 2009 UMW course: CHEM 101 Introduction to Chemistry
This class is designed for non-science majors. Students will study the fundamental principles of chemistry in the context of real-world applications to atmospheric and water chemistry. Major fundamental topics covered include atomic structure, chemical bonding, chemical reactions, radiant energy, thermodynamics, acids and bases, and solutions. Most applications are cross-disciplinary with physics, biology, and/or earth sciences. Student learning is evaluated through homework, exams, labs, fieldwork, and research papers. $15 Course Fee. Prereq: equivalent of MATH 007 (M 095) or higher; high school chemistry recommended.

**CHMY 141 COLLEGE CHEMISTRY I (4)**
Pre-Fall 2009 UMW course: CHEM 131 General Chemistry
Fundamental principles of modern chemistry. Major areas of emphasis include stoichiometry, gas laws, thermochemistry, atomic structure and periodicity, chemical bonding, molecular geometry, and solutions. Lab included. $25 Course Fee. Prereq: equivalent of MATH 007 (M 095) or higher; high school chemistry or CHEM 101 (CHMY 121) recommended. (fall)
CHMY 143 COLLEGE CHEMISTRY II (4)
Pre-Fall 2009 UMW course: CHEM 132 General Chemistry II
Fundamental principles of modern chemistry. Major areas of emphasis include acid-base and oxidation-reduction reactions, kinetics, chemical equilibrium, solubility, thermodynamics, nuclear chemistry, organic, and biochemistry. Lab included. $25 Course Fee. Prereq: CHEM 131 (CHMY 141) grade C- or higher. (spring)

CHMY 290 UNDERGRADUATE RESEARCH (V 2-8)
Selected topics under faculty supervision. Prereq: c/i, c/pc, and c/vc. (fall/spring)

CHMY 292 INDEPENDENT STUDY (V 1-4)
Pre-Fall 2009 UMW course: CHEM 290 Independent Study
Directed research or study on an individual basis. Prereq: c/i, c/pc, and c/vc. (fall/spring)

CHMY 311 ANALYTICAL CHEMISTRY:QUANTITATIVE ANALYSIS (4)
Pre-Fall 2009 UMW course: CHEM 251 Quantitative Analysis
Course in analytical chemistry emphasizing laboratory skills, which include gravimetric, volumetric, and spectrophotometric techniques. Lab included. $30 Course Fee. Prereq: CHEM 132 (CHMY 143). (on demand)

CHMY 321 ORGANIC CHEMISTRY I (4)
Pre-Fall 2009 UMW course: CHEM 331 Organic Chemistry
Organic compounds and their reactions as the basis of life. Particular attention is paid to nomenclature for the major classes of organic compounds, reaction mechanisms, and a survey of laboratory methods including synthesis and instrumentation. Lab included. $25 Course Fee. Prereq: CHEM 132 (CHMY 143) grade C- or higher, or c/i. (fall/even-numbered years)

CHMY 323 ORGANIC CHEMISTRY II (4)
Pre-Fall 2009 UMW course: CHEM 332 Organic Chemistry
Organic compounds and their reactions as the basis of life. Particular attention is paid to nomenclature for the major classes of organic compounds, reaction mechanisms, and a survey of laboratory methods including synthesis and instrumentation. Lab included. $25 Course Fee. Prereq: CHEM 132 (CHMY 143) and CHEM 331 (CHMY 321) grade C- or higher; or c/i. (spring/odd-numbered years)

CHMY 361 ELEMENTS OF PHYSICAL CHEMISTRY (4)
Pre-Fall 2009 UMW course: CHEM 355 Physical Chemistry
Advanced theoretical study of chemistry. Thermodynamic and kinetic principles will be used to better understand the major conceptual aspects of biochemistry and inorganic and organic chemistry. An attempt will be made to synthesize chemical knowledge obtained in a variety of courses. Prereq: CHEM 132 (CHMY 143), or c/i. (on demand)

CHMY/GEO 431 ENVIRONMENTAL GEOCHEMISTRY (4)
Pre-Fall 2009 UMW course: CHEM/GEOL 431 Environmental Geochemistry
Students will examine and learn about the chemical and geological principles and reactions in natural systems: aquatic, marine, terrestrial, and atmospheric, and the effect and fate of contaminants in the environment. This is a field- and laboratory-oriented class, with computer analysis of data. Students successfully completing the class will demonstrate their knowledge of geochemical sampling and analysis techniques in one or more research projects. Students will evaluate their own and/or published data according to concepts studied in the class and present their research in papers and oral reports. Includes exams and teamwork. A field-based research project will require extended class hours during the second and/or third week of class. May have a service-learning component. $40 Course Fee. Prereq: GEOL 101 (GEO 101) or GEOL 150 (GEO 103), and CHEM 131 (CHMY 141) and CHEM 132 (CHMY 143). (spring/odd-numbered years)

CHMY 490 UNDERGRADUATE RESEARCH (V 2-8)
Selected topics under faculty supervision. Prereq: c/i, c/pc, and c/vc. (on demand)

CHMY 492 INDEPENDENT STUDY (V 1-4)
Pre-Fall 2009 UMW course: CHEM 490 Independent Study
Directed research or study on an individual basis. Prereq: c/i, c/pc, and c/vc. (fall/spring)

CHMY 498 INTERNSHIP/COOPERATIVE EDUCATION/OMNIBUS (V 1-15)
Pre-Fall 2009 UMW course: CHEM 400 Coop Ed/Internship
Incorporation of an appropriate work experience into the student’s academic preparation. Prereq: Junior/Senior standing, c/i, c/pc, and c/vc. (fall/spring)

CHMY 499 SENIOR PROJECT/Thesis (V 1-15)
Pre-Fall 2009 UMW course: CHEM 498 Senior Project/Thesis
An individual project or thesis closely associated with the student’s academic program and career goals. Project/thesis election subject to approval of project or thesis advisor. Prereq: Junior/Senior standing, c/i, c/pc, and c/vc. (fall/spring)

Note: New OCHE Common Course Numbering system rubrics and courses are displayed in italics throughout this Catalog.

COMPUTER APPLICATIONS (CAPP)
[New OCHE rubric effective Fall 2009]

CAPP 100 SHORT COURSES: COMPUTER LITERACY (1)
Pre-Fall 2009 UMW course: COMS 101 Introduction to Computers & Presentations
Students will become informed consumers of hardware and software products, learn basic functions to communicate through technology, and explore legal, social, and ethical computer issues. Students will also learn terminology for technology and software applications used and will be introduced to the campus computer labs, e-mail system, and Learning Management System. Students will also develop a working knowledge of the basic features of Microsoft PowerPoint. Students will be evaluated by hands-on assignments, examinations, and a portfolio. (fall/spring)

CAPP 112 SHORT COURSES: MICROSOFT POWERPOINT (1)
Pre-Fall 2009 UMW course: COMS 104 Beginning PowerPoint
In this hands-on course, students will develop a working knowledge of the basic features of Microsoft PowerPoint. Students will be evaluated by hands-on assignments, examinations, and a final portfolio. (fall)

CAPP 114 SHORT COURSES: MICROSOFT WORD (1)
Pre-Fall 2009 UMW course: COMS 102 Beginning Word Processing
In this hands-on course, students will develop a working knowledge of the basic features of Microsoft Word. At the conclusion of the course, students will have covered the core competencies for the Microsoft Office Specialist exam in Microsoft Word. Students will be evaluated by hands-on assignments, examinations, and a final portfolio. This course is articulated through Tech Prep. (fall/spring)
In this hands-on course, students will further develop their competence in word processing using the advanced features of Microsoft Word, such as macros, merges, desktop publishing features, large document creation, and editing. Students will explore integration of Word with other computer application programs. At the conclusion of the course, students will have covered the expert competencies for the Microsoft Office Specialist exam in Word. Students will be evaluated by hands-on assignments, special projects, examinations, and a final portfolio. Prereq: COMS 102 (CAPP 114), or c/i. (fall/spring)

CAPP 116 SHORT COURSES: MICROSOFT EXCEL (1)
Pre-Fall 2009 UMW course: COMS 108 Beginning Spreadsheets
In this hands-on course, students will develop a working knowledge of the basic features of Microsoft Excel. At the conclusion of the course, students will have covered the core competencies for the Microsoft Office Specialist exam in Microsoft Excel. Students will be evaluated by hands-on assignments, examinations, and a final portfolio. This course is articulated through Tech Prep. (fall/spring)

CAPP 118 SHORT COURSES: MICROSOFT ACCESS (1)
Pre-Fall 2009 UMW course: COMS 109 Beginning Database
In this hands-on course, students will develop a working knowledge of the basic features of Microsoft Access. Students will be evaluated by hands-on assignments, examinations, and a final portfolio. (fall/spring)

CAPP 131 BASIC MICROSOFT OFFICE (4)
Pre-Fall 2009 UMW course: COMS 135 Microcomputer Applications
In this hands-on course, students will develop a working knowledge of word processing, spreadsheet, and database management software applications in relation to business. During this course, students will use Windows for file and disk management, they will use e-mail to communicate with the instructor and other class members, and they will use the Internet to research assigned topics. The course will be evaluated by hands-on assignments, examinations, and a final project. (fall/spring)

CAPP 160 MULTIMEDIA: MICROSOFT PUBLISHER & POWERPOINT (2)
Pre-Fall 2009 UMW course: COMS 234 Multimedia
In this hands-on course, students will use Microsoft Publisher to create a variety of documents and publications including calendars, brochures, and newsletters. Students will also further develop their competence in presentation software by using advanced features of Microsoft PowerPoint, and will learn to use different varieties of digital cameras and their features. At the conclusion of the course, students will have covered the competencies for the Microsoft Office Specialist exam in PowerPoint. Students will be evaluated by hands-on assignments, special projects, examinations, and a final portfolio. $25 Course Fee. Prereq: COMS 101 (CAPP 100), or c/i. (fall)

CAPP 251 ADVANCED MICROSOFT OFFICE (4)
Pre-Fall 2009 UMW course: COMS 236 Advanced Microcomputer Applications
In this hands-on course, students will further develop their competence using word processing, electronic spreadsheets and database features. Students will also explore the integration of computer applications. Students will be evaluated by hands-on assignments, special projects, and examinations. Prereq: COMS 135 (CAPP 131), or c/i.

CAPP 254 ADVANCED MICROSOFT WORD (4)
Pre-Fall 2009 UMW course: COMS 260 Word Processing & Applications
In this hands-on course, students will develop a working knowledge of the basic and advanced features of Microsoft Word. Students will explore the integration of Word with other computer application programs and learn the basics of voice and hand written recognition software. Students will be evaluated by hands-on assignments, examinations, and a portfolio. At the conclusion of this course, students will have covered the competencies for both the Microsoft Office Specialist exam and Expert exam in Microsoft Word. (fall/spring)

CAPP 266 ADVANCED MICROSOFT EXCEL APPLICATIONS (4)
Pre-Fall 2009 UMW course: COMS 265 Spreadsheets & Applications
In this hands-on course, students will develop a working knowledge of the basic and advanced features of Microsoft Excel. Students will explore the integration of Excel with other computer application programs and be introduced to Quickbooks and Microsoft Access. Students will be evaluated by hands-on assignments, examinations, and a portfolio. At the conclusion of this course, students will have covered the competencies for both the Microsoft Office Specialist exam and Expert exam in Microsoft Excel.

Note: New OCHE Common Course Numbering system rubrics and courses are displayed in italics throughout this Catalog.

COMPUTER SCIENCE (COMS)
[For OCHE equivalent courses effective Fall 2009, see COMPUTER APPLICATIONS (CAPP)]

COMS 101 INTRODUCTION TO COMPUTERS & PRESENTATIONS (1)
See CAPP 100 Short Courses: Computer Literacy

COMS 102 BEGINNING WORD PROCESSING (1)
See CAPP 114 Short Courses: Microsoft Word

COMS 104 BEGINNING POWERPOINT (1)
See CAPP 112 Short Courses: Microsoft PowerPoint

COMS 108 BEGINNING SPREADSHEETS (1)
See CAPP 116 Short Courses: Microsoft Excel

COMS 109 BEGINNING DATABASE (1)
See CAPP 118 Short Courses: Microsoft Access

COMS 111 PROGRAMMING FUNDAMENTALS (3)
This course reviews the problem-solving techniques and strategies utilized in computer programming. Visual BASIC is the primary language employed, but students may also work with other languages.

Students will design applications, use variables and constants, create selection and repetition structures, use dialog boxes, random access files, database access, and variable arrays. This course may also be offered as an online course. This course is articulated through Tech Prep. Prereq: COMS 101 (CAPP 100), and either MATH 101 (M 128) or MATH 131 (STAT 121). (fall)

COMS 112 ADVANCED PROGRAMMING (3)
Continuation of useful programming techniques using a variety of languages. Prereq: COMS 111. (on demand)

COMS 115 COMPUTER BASICS FOR EDUCATORS (4)
In this hands-on course, students will develop a working knowledge of the basic features of the Microsoft Office Suite. Students will be evaluated by hands-on assignments, examinations, and a final portfolio. (fall/spring)

COMS 135 MICROCOMPUTER APPLICATIONS (3)
See CAPP 131 Basic Microsoft Office
COMS 176 INTRODUCTION TO ROUTER TECHNOLOGY (CISCO II) (4)  
*See ITS 176 Introduction to Router Technology*

COMS 201 COMPUTER PROGRAM APPLICATION (V 1-2)  
Special problems in programming. Prereq: COMS 111. (on demand)

COMS 205 BUSINESS INFORMATION SYSTEMS (4)  
This course provides an introduction to management information systems that students need to know to be successful in the world of business. Some of the topics covered include: MIS, explaining the role of information systems in supporting organizational strategy and competitive advantage, fundamental IT concepts, hardware and software, database processing, data communications, electronic commerce, ethical implications of information technology, and the basics of networking. Students will be evaluated by oral and written assignments, examinations, and a final project. $10 Course Fee. Prereq: COMS 101 (CAPP 100), or c/i. (fall)

COMS 210 COMPUTER HARDWARE & SOFTWARE MANAGEMENT (4)  
*See ITS 205 Computer Hardware & Software Management*

COMS 212 INTRODUCTION TO WEB DESIGN (4)  
This project-based course introduces students to the basic concepts related to designing websites. Students will be creating sites with website development software and HTML. They learn and follow the steps to create a website by planning, designing, and developing. Students will be evaluated by hands-on projects and examinations. Prereq: ART 140, or c/i.

COMS 215 INTRODUCTION TO C PROGRAMMING (3)  
Students in this course examine the C programming language and its rise in popularity as one of the leading structured languages. Topics include data types and structures, design of library functions, file interfacing, pointers, and control of program flow. Students will also compare C with other languages utilizing similar syntax. Prereq: COMS 111. (spring)

COMS 219 DIRECTED STUDY (V 1-5)  
Selected topics under faculty supervision. Prereq: c/i, c/i, c/pc, and c/vc. (fall/spring)

COMS 226 ROUTING & SWITCHING (CISCO III) (4)  
*See ITS 258 Routing & Switching*

COMS 232 ADVANCED WORD PROCESSING (1)  
*See CAPP 115 Short Courses: Advanced Microsoft Word*

COMS 234 MULTIMEDIA (2)  
*See CAPP 160 Multimedia: Microsoft Publisher & PowerPoint*

COMS 235 VIDEO & AUDIO DESIGN (4)  
In this project-based introductory course, students will gain the competencies to create video and audio projects. Skills developed in this course will be design of video and audio projects, capturing and editing video and audio, podcasts, communication through a digital media and project management. Students will be evaluated on hands-on projects and examinations. (spring/odd-numbered years)

COMS 236 ADVANCED MICROCOMPUTER APPLICATIONS (4)  
*See CAPP 251 Advanced Microsoft Office*

COMS 238 ADVANCED SPREADSHEETS (2)  
In this hands-on course, students will further develop their competence in electronic spreadsheets by using the advanced features of Microsoft Excel, such as financial and trigonometric functions, macros, data tables, solver, and scenario management. Students will explore integration of Excel with other computer application programs and be introduced to QuickBooks software. At the conclusion of the course, students will have covered the expert competencies for the Microsoft Office Specialist exam in Excel. Students will be evaluated by hands-on assignments, special projects, examinations, and a final portfolio. (fall/spring)

COMS 240 ROBOTICS IN EDUCATION (1)  
This hands-on course will give students the fundamentals of robotics and its use and benefit in the classroom. It will expand students’ knowledge of Lego programming, curriculum integration of educational robots, and hardware components, and it will explore the impact of robots throughout different curriculum areas. Prereq: COMS 115 or equivalent COMS courses, or c/i. (on demand)

COMS 242 DIGITAL PRINT MEDIA (4)  
In this project-based course, students will gain competencies in communication skills in print and graphic design. Through hands-on activities, students will learn how to create interactive documents meant for digital publication. Students will be evaluated on hands-on projects and examinations. (spring/even-numbered years)

COMS 245 PROGRAMMING FOR WEB APPLICATIONS (3)  
This course introduces Internet and intranet programming languages such as HTML, PERL, and JavaScript in the context of building Internet and World Wide Web applications. This course will focus on best practices enabled by each tool. (on demand)

COMS 260 WORD PROCESSING & APPLICATIONS (4)  
*See CAPP 254 Advanced Microsoft Word*

COMS 265 SPREADSHEETS & APPLICATIONS (4)  
*See CAPP 266 Advanced Microsoft Excel Applications*

COMS 270 FUNDAMENTALS OF YEARBOOK LAYOUT (2)  
Students will be introduced to the fundamentals of creating a yearbook including but not limited to the basics of digital photography, scanning, designing, creating, and editing yearbook layouts, and using the basic functions of Adobe InDesign. Yearbook Editors must be enrolled in this course. Prereq: COMS 101 (CAPP 100) or equivalent.

COMS 276 NETWORK DESIGN (CISCO IV) (4)  
*See ITS 270 Network Design*

COMS 290 INDEPENDENT STUDY (V 1-4)  
*See ITS 292 Independent Study*

COMS 302 DATA STRUCTURES (3)  
Examination of software for file processing, searches and sorts, data retrieval, stacks, linked lists, trees, graphics, and generalized database structures. Prereq: COMS 111 and COMS 112. (on demand)

COMS 306 BUSINESS INFORMATION SYSTEMS LAB (3)  
Students further develop their expertise in maintaining computer hardware and software by working in a networked computer lab. Students must develop an independent contract with their instructor, which further develops their hardware and software expertise. Prereq: COMS 210 (ITS 205) and c/i. (fall--arrange with instructor)

COMS 325 DIGITAL GRAPHICS & ANIMATION DESIGN (4)  
This project-based course will introduce students to the concepts of creating graphics and animations for the web. Students will design images for background, text, graphics, navigation, and animation. Students will gain competencies in using colors, file formats, and compression methods. Students will be evaluated on hands-on projects and examinations. (spring/odd-numbered years)

COMS 334 ADVANCED MULTIMEDIA (2)  
In this hands-on course, students will use a variety of hardware, software, and input/output media to complete multimedia projects including web pages, electronic presentations and portfolios, and printed publications. Students will be evaluated by hands-on assignments,
special projects, examinations, and a final portfolio. $15 Course Fee. Prereq: COMS 101 (CAPP 100) and COMS 234 (CAPP 160); or c/i. (on demand)

COMS 335 ADVANCED WEB DESIGN (4)
In this project-based course, students will use current web code to design web publications. Coding techniques such as CSS, Dynamic HTML, and JavaScript will be used in the course. Students will be evaluated on hands-on projects and examinations. Prereq: COMS 212, or c/i. (spring/even-numbered years)

COMS 339 DATABASE MANAGEMENT (3)
In this hands-on course, students will further develop their competence using database management software including creating, searching, querying, and editing database tables, as well as creating reports, on-screen forms, and macros. Students will also explore integration of databases with other application software and creation of Web-enabled information from a database. During this course, students will learn about relational databases and the basics of database design. Students will be evaluated by hands-on assignments, examinations, and a final project. (on demand)

COMS 351 METHODS & MATERIALS IN COMPUTER APPLICATIONS (2)
Methods of lesson planning, presentation, skill building, and assessment in computer subjects such as database management, spreadsheets, desktop publishing, telecommunications, word processing, presentation graphics, multimedia, computerized accounting, and programming. Students will demonstrate subject competency through their portfolios and a variety of microteaching experiences. Class discussion, team projects, microteaching, lecture, and electronic media. $35 Course Fee. Prereq: TEP and Junior standing. (fall)

COMS 370 YEARBOOK DESIGN & PUBLICATION LAYOUT (3)
Students will use a variety of publication layouts to complete UMW’s yearbook. Students will complete photo analyses, use photo enhancing software to edit images, study the basics of publication layout and design, and use the advanced features of Adobe InDesign. Yearbook Editors must be enrolled in this course. Prereq: COMS 270, or c/i.

COMS 387 TELECOMMUNICATIONS (3)
This course covers the essential components found in telecommunication systems including content relating to data transmission, signal propagation, encoding and decoding, multiplexing, channel capacity, microwave and satellite communication, and computer networking. Students will also be able to utilize the Internet for research and communication purposes including home page development, e-mail transactions, and development of e-commerce strategies. Prereq: COMS 210 (ITS 205), or c/i. (fall)

COMS 400 COOPERATIVE EDUCATION/INTERNSHIP (V 1-15)
This option is intended to provide students with an opportunity to incorporate an appropriate extended field experience into their academic program. Prereq: Senior standing, c/i, c/pc, and c/vc. (fall/spring)

COMS 403 SYSTEMS ANALYSIS & DESIGN (4)
See ITS 403 Systems Analysis & Design

COMS 409 SEMINAR (V 1-3) R
Selected topics of interest. Prereq: c/i and c/pc. (on demand)

COMS 410 CAPSTONE PROJECT (4)
This hands-on course will integrate all competencies gained during the Web & Digital Media courses to complete an individual project. This course will include discussions about professional and ethical issues related to the discipline of Web & Digital Media Development. Students will be evaluated on the hands-on project created in class. Prereq: ART 140, COMS 205, COMS 210 (ITS 205), COMS 212, COMS 235, COMS 242, COMS 325, and COMS 335; or c/i.

COMS 419 DIRECTED STUDY (V 1-5)
Selected topics under faculty supervision. Prereq: c/i, c/pc, and c/vc. (fall/spring)

COMS 420 CERTIFICATIONS IN HARDWARE, SOFTWARE, & NETWORKING (4)
See ITS 420 Certifications in Hardware & Software

COMS 490 INDEPENDENT STUDY (V 1-4)
See ITS 492 Independent Study

COMS 498 SENIOR PROJECT/THESIS (V 1-15)
An individual project or thesis closely associated with the student’s academic program and career goals. Student works with one selected faculty member. Prereq: Senior standing, c/i, c/pc, and c/vc. (fall/spring/summer)

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### DRAMA (DR)

[For OCHE equivalent courses effective Fall 2010, see appropriate rubric & course listed beneath individual courses]

**DR 101 DRAMA FUNDAMENTALS (2/4)**  
See THTR 101 Introduction to Theatre

**DR 217 THEATRE PRACTICUM (V 1-2) R-3**  
See THTR 205 Theatre Workshop II

**DR 219 DIRECTED STUDY (V 1-5)**  
Upon successful completion of the course, students exhibit fundamental competencies through written documentation or participation in performance/production of one or more areas of drama such as stage management or dramaturgy. Prereq: c/i, c/pc, and c/vc. (fall/spring)

**DR 241 PLAY PRODUCTION & INTRODUCTION TO DIRECTING (4) R**  
See THTR 276 Play Production & Introduction to Directing

**DR 243 STAGECRAFT & COSTUME (4)**  
See THTR 202 Stagecraft I: Lighting/Costumes

**DR 276 ACTING FUNDAMENTALS & STYLES (4)**  
See THTR 120 Introduction to Acting I

**DR 290 INDEPENDENT STUDY (V 1-4)**  
See THTR 292 Independent Study

**DR 346 DRAMA FOR YOUTH (2)**  
See THTR 338 Drama for Youth

**DR 351 CLASSROOM DRAMA METHODS (2)**  
See THTR 397 Methods: Drama for K-12

**DR 400 COOPERATIVE EDUCATION/INTERNSHIP (V 1-15)**  
See THTR 499 Senior Project/Thesis

**DR 401 CREATIVE DRAMA METHODS (2)**  
Theories, procedures, and materials for creative drama in educational and recreational settings are studied and practiced. Students will demonstrate knowledge and practical skills in improvisational drama as an art form as well as drama’s use as a means to explore history, literature, social issues, and other topics. (spring/odd-numbered years)

**DR 409 SEMINAR (V 1-3) R**  
See THTR 494 Seminar/Workshop

**DR 419 DIRECTED STUDY (V 1-5)**  
Topics are selected and study is organized according to needs of 1-5 students; the study may duplicate a catalog course that is not being offered that particular term. Learner outcomes are devised according to the topic and determined in accordance with the needs and interests of the student. Prereq: c/i, c/pc, and c/vc. (on demand)

**DR/ENG 441 DRAMA HISTORY & LITERATURE GENRE (4)**  
See LIT 441 Drama History & Literature Genre

**DR/ENG 455 SHAKESPEARE (4)**  
See LIT 473 Studies in Shakespeare

**DR 460 ADVANCED DIRECTING (4)**  
See THTR 479 Directing for Community/Schools

**DR 466 STORYTELLING (2)**  
See THTR 435 Storytelling

**DR 490 INDEPENDENT STUDY (V 1-4)**  
See THTR 492 Independent Study

**DR 498 SENIOR PROJECT/THESIS (V 1-15)**  
See THTR 499 Senior Project/Thesis

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### ECONOMICS (ECNS)

[New OCHE rubric effective Fall 2009]

**ECNS 101 ECONOMIC WAY OF THINKING (3)**  
Pre-Fall 2009 UMW course: ECON 151 Introduction to Economics  
This course will provide the background necessary to understand the operation of the U.S. economy. Topics will include an understanding of decision-making processes for the consumer, the firm, the market, and the overall economy. The methodology for application of these concepts to personal and social issues will be emphasized. The method of delivery will include lecture, group interaction and discussion, computerized simulations, and the use of the Internet as a means of gaining access to information sources. [This course will not substitute for ECON 251 (ECNS 202) or ECON 252 (ECNS 201) for the Social Science Broadfield or Business & Computer Applications Secondary Education degrees.] (on demand)

**ECNS 201 PRINCIPLES OF MICROECONOMICS (3)**  
Pre-Fall 2009 UMW course: ECON 252 Principles of Microeconomics  
An introduction to microeconomics: theory of the firm and household, market price determination, theory of production, elements of value, and distribution theory. Students will be expected to apply microeconomic theory to personal and business decision-making. The method of delivery will include lecture, group interaction and discussion, computerized simulations, and the use of the Internet as a means of gaining access to information sources. Students will be assessed by means of essay examinations, research papers, and computerized simulations. Prereq: Sophomore standing, or c/i. (fall/spring)

**ECNS 202 PRINCIPLES OF MACROECONOMICS (3)**  
Pre-Fall 2009 UMW course: ECON 251 Principles of Macroeconomics  
An introduction to macroeconomics: national income analysis, unemployment, price stability and growth, monetary and fiscal policies, and international trade and finance. Students will be expected to analyze current economic issues using a macroeconomic model. The method of delivery will include lecture, group interaction and discussion, computerized simulations, and the use of the Internet as a means of gaining access to information sources. Students will be assessed by means of essay examinations, research papers, and computerized simulations. Prereq: Sophomore standing, or c/i. (fall/spring)
ECNS 203 PRINCIPLES OF MICROECONOMICS & MACROECONOMICS (4)
Pre-Fall 2009 UMW course: ECON 250 Principles of Economics
This course provides an introduction to both macro- and micro-economics including supply and demand theory, prices and unemployment, aggregate demand and supply and GDP, fiscal and monetary policy, international trade and finance, and theory of production and distribution. Students are expected to collect, analyze, and present economic data using application-based exercises.

ECNS 290 UNDERGRADUATE RESEARCH (V 2-8)
Selected topics under faculty supervision. Prereq: c/i, c/pc, and c/vc. (fall/spring)

ECNS 292 INDEPENDENT STUDY (V 1-4)
Pre-Fall 2009 UMW course: ECON 290 Independent Study
Directed research or study on an individual basis. Prereq: c/i, c/pc, and c/vc. (fall/spring)

ECNS 313 MONEY & BANKING (3)
Pre-Fall 2009 UMW course: ECON 357 Money & Banking
Nature, evolution, and functions of money; the role of depository institutions; structure of financial markets; principles of central banking; monetary theory and the instruments of monetary policy; the role of money in the international economy. Students will be able to demonstrate how individual and central banks operate to facilitate personal, business, and international transactions while maintaining national stability. The method of delivery will include lecture, group interaction and discussion, computerized simulations, and use of the Internet as a means of gaining access to information sources. Students will be assessed by means of essay examinations, research papers, and computerized simulations. Prereq: ECON 250 (ECNS 203), or ECON 251 (ECNS 202), or ECON 252 (ECNS 201); or c/i. (spring)

ECNS 332 ECONOMICS OF NATURAL RESOURCES (4)
Pre-Fall 2009 UMW course: ECON 434 Resource Economics
Analysis of methods of resource valuation, trade-offs involved in their preservation or development, and application of these methods to land-use planning. Analysis of policy implications of environmental legislation. Students will be able to demonstrate their understanding of the principles in the development of land-use plans and environmental impact statements. The method of delivery will include lecture, group interaction and discussion, computerized simulations, and use of the Internet as a means of gaining access to information sources. Students will be assessed by means of essay examinations, research papers, and computerized simulations. Prereq: ECON 250 (ECNS 203), or ECON 251 (ECNS 202), or ECON 252 (ECNS 201). (on demand)

ECNS 334 ECONOMICS OF TOURISM & RECREATION (3)
Pre-Fall 2009 UMW course: ECON 334 Economics of Tourism & Recreation
Analysis of the economic role of tourism at the state, regional, national, and international levels. Students will be able to analyze the economic role of the firm engaged in tourism and will be able to assess the impacts of tourism by means of input/output analysis. The method of delivery will include lecture, group interactions and discussion, computerized simulations, and use of the Internet as a means of gaining access to information sources. Students will be assessed on the basis of group projects and essay examinations. Prereq: ECON 250 (ECNS 203), or ECON 251 (ECNS 202), or ECON 252 (ECNS 201); or c/i. (fall)

ECNS 431 INTERNATIONAL TRADE (3)
Pre-Fall 2009 UMW course: ECON 358 International Trade & Finance
Principles of trade and finance in a world economy. Analysis of comparative advantage, impediments to trade, and international financial systems. Students will be able to demonstrate the advantages and problems of trade on an international level, institutions developed to facilitate trade and finance, and the functioning of major international financial institutions. The method of delivery will include lecture, group interaction and discussion, computerized simulations, and use of the Internet as a means of gaining access to information sources. Students will be assessed by means of essay examinations, research papers, and computerized simulations. Prereq: ECON 250 (ECNS 203), or ECON 251 (ECNS 202), or ECON 252 (ECNS 201). (fall/spring)

ECNS 490 UNDERGRADUATE RESEARCH (V 2-8)
Selected topics under faculty supervision. Prereq: c/i, c/pc, and c/vc. (on demand)

ECNS 492 INDEPENDENT STUDY (V 1-4)
Pre-Fall 2009 UMW course: ECON 490 Independent Study
Directed research or study on an individual basis. Prereq: c/i, c/pc, and c/vc. (fall/spring)

ECNS 494 SEMINAR/WORKSHOP (V 1-4)
Pre-Fall 2009 UMW course: ECON 494 Seminar
Selected topics of interest. Prereq: c/i and c/pc. (on demand)

ECNS 498 INTERNSHIP/COOPERATIVE EDUCATION/OMNIBUS (V 1-15)
Pre-Fall 2009 UMW course: ECON 400 Coop Ed/Internship
This option is intended to provide students with an opportunity to incorporate an appropriate extended field experience into their academic program. Prereq: Senior standing, c/i, c/pc, and c/vc. (fall/spring)

ECNS 499 SENIOR PROJECT/THESIS (V 1-15)
Pre-Fall 2009 UMW course: ECON 498 Senior Project/Thesis
An individual project or thesis closely associated with the student's academic program and career goals. Student works with one selected faculty member. Prereq: Senior standing, c/i, c/pc, and c/vc. (fall/spring)

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ECONOMICS (ECON)
[For OCHE equivalent courses effective Fall 2009, see ECONOMICS (ECNS)]

ECON 151 INTRODUCTION TO ECONOMICS (3)
See ECNS 101 Economic Way of Thinking

ECON/GEOR/POLS 201 THE WORLD ECONOMY (4)
See ISSS 201 The World Economy

ECON 219 DIRECTED STUDY (V 1-5)
Selected topics under faculty supervision. Prereq: c/i, c/pc, and c/vc. (fall/spring)

ECON 250 PRINCIPLES OF ECONOMICS (4)
See ECNS 203 Principles of Microeconomics & Macroeconomics

ECON 251 PRINCIPLES OF MACROECONOMICS (3)
See ECNS 202 Principles of Macroeconomics

ECON 252 PRINCIPLES OF MICROECONOMICS (3)
See ECNS 201 Principles of Microeconomics

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<td>INDEPENDENT STUDY (V 1-4)</td>
<td>See ECNS 292 Independent Study</td>
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<td>ECON 334</td>
<td>ECONOMICS OF TOURISM &amp; RECREATION (3)</td>
<td>See ECNS 334 Economics of Tourism &amp; Recreation</td>
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<td>ECON 357</td>
<td>MONEY &amp; BANKING (3)</td>
<td>See ECNS 313 Money &amp; Banking</td>
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<td>INTERNATIONAL TRADE &amp; FINANCE (4)</td>
<td>See ECNS 431 International Trade</td>
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<td>COOPERATIVE EDUCATION/INTERNSHIP (V 1-15)</td>
<td>See ECNS 498 Internship/Cooperative Education/Omnibus</td>
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<tr>
<td>ECON 409</td>
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<td>DIRECTED STUDY (V 1-5)</td>
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**EDUCATION (ED)**

*For OCHE equivalent courses effective Fall 2010, see appropriate rubric & course listed beneath individual courses*

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<td>ED 120</td>
<td>BECOMING A PROFESSIONAL EDUCATOR (4)</td>
<td>See EDU 201 Introduction to Education with Field Experience</td>
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<tr>
<td>ED 142</td>
<td>INTRODUCTION TO EARLY CHILDHOOD (1)</td>
<td>Provides an overview of the early childhood education issues, practices, and methodology. In addition, students learn about CDA functional areas, indicators, activities, and training and assessment steps. This course is articulated through Tech Prep. (fall/even-numbered years)</td>
</tr>
<tr>
<td>ED 143</td>
<td>INTRODUCTION TO EARLY CHILDHOOD LAB (1)</td>
<td>Focus is on becoming acquainted with program policies and philosophies, exposure to a variety of learning areas, and implementation of activities with small groups of children. Students also become more familiar with their own learning styles and professional goals. This course is articulated through Tech Prep. $5 Course Fee. (fall/even-numbered years)</td>
</tr>
<tr>
<td>ED 144</td>
<td>CREATING AN ENVIRONMENT FOR LEARNING (2)</td>
<td>Explores the developmentally appropriate environment and its effect on the learner in the physical, cognitive, and social domains. It also deals with planning for learning: units, scheduling, transitions, lesson planning, children’s safety, nutrition, and health. (fall/even-numbered years)</td>
</tr>
<tr>
<td>ED 145</td>
<td>CREATING AN ENVIRONMENT FOR LEARNING LAB (1)</td>
<td>Designing and implementing developmentally appropriate classroom arrangements, learning centers, schedules, lesson plans, and transitions. $5 Course Fee. (fall/even-numbered years)</td>
</tr>
<tr>
<td>ED 195</td>
<td>CAREER PLANNING: TAKE HOLD OF YOUR FUTURE (2)</td>
<td>Assessment of student’s interests and abilities leads to investigation of various occupational areas. Emphasis on lifelong processes such as making decisions, understanding self, and planning strategies for successful goal attainment. (fall/spring)</td>
</tr>
<tr>
<td>ED 200</td>
<td>EARLY CHILDHOOD INTERNSHIP (6)</td>
<td>Participate 20 hours per week in a supervised early childhood setting. With the instructor, students design an individualized training plan that outlines goals, activities, and assessment for the internship based upon the student’s needs, interests, and demonstration of competence in working with children, families, and staff members. (fall/spring)</td>
</tr>
<tr>
<td>ED 201</td>
<td>INTRODUCTION TO SPECIAL EDUCATION (2)</td>
<td>An introduction to the current mandates of state and federal governments regarding the education and services to children with disabilities. The students will discuss IDEA, Section 504 of the Vocational Rehabilitation Act, current delivery service systems to education, and how this affects those identified with disabilities. A 30-hour field experience is required. (fall/even-numbered years)</td>
</tr>
<tr>
<td>ED 210</td>
<td>METHODS OF TEACHING GRAMMAR (2)</td>
<td>See EDU 263 Methods of Teaching Grammar</td>
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<tr>
<td>ED 219</td>
<td>DIRECTED STUDY (V 1-5)</td>
<td>Selected topics under faculty supervision. Prereq: c/i, c/pc, and c/vc. (fall/spring)</td>
</tr>
<tr>
<td>ED 234</td>
<td>TECHNOLOGY FOR ELEMENTARY TEACHERS (4)</td>
<td>See EDU 370 Integrating Technology into Education</td>
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<tr>
<td>ED 240</td>
<td>POSITIVE CHILD DISCIPLINE (2)</td>
<td>Focuses on developing skills in using positive guidance techniques while enhancing children’s self-concept and developing children’s pro-social skills. (fall/even-numbered years)</td>
</tr>
<tr>
<td>ED 241</td>
<td>POSITIVE CHILD DISCIPLINE LAB (1)</td>
<td>Demonstration of skills in using positive guidance, establishing a pro-social environment, and implementing lessons that enhance self-concept and social skills. $5 Course Fee. (fall/even-numbered years)</td>
</tr>
<tr>
<td>ED 242</td>
<td>MEETING THE NEEDS OF THE FAMILY (2)</td>
<td>Introduction of benefits, barriers, foundations, and techniques for encouraging parent-teacher partnerships. Students also explore family structures and dynamics, both functional and dysfunctional. (spring/odd-numbered years)</td>
</tr>
<tr>
<td>ED 243</td>
<td>MEETING THE NEEDS OF THE FAMILY LAB (1)</td>
<td>Focus on developing and demonstrating skills that encourage parent-teacher partnerships including sharing information informally, making home visits, participating in parent/teacher conferences, and developing</td>
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</table>
ED 250 CHILD & ADOLESCENT GROWTH & DEVELOPMENT (3)
Students will examine, analyze, and apply research, theories, and issues concerning basic biosocial, cognitive, and psychosocial developmental stages from conception through childhood and adolescence. (fall/even-numbered years)

ED 251 CHILD & ADOLESCENT GROWTH & DEVELOPMENT LAB (1)
Students use a variety of instruments to observe and interact with individual children as a way of integrating theory and practice. $5 Course Fee. (fall/even-numbered years)

ED 253 PSYCHOLOGICAL FOUNDATIONS OF TEACHING & LEARNING (4)
See EDU 222 Educational Psychology & Child Development

ED 255 CONTEMPORARY AMERICAN INDIAN EDUCATION (3)
The purpose of this course is to provide training and experience to address the unique needs of contemporary American Indian students. The course fulfills the requirements of MCA (Montana Code Annotated) 20-1-501, intended to enhance the improvement of all federal, tribal, and public schools that serve American Indian students. Students will know about the effects of poverty, high school dropout rates, substance abuse, over-representation in special education, teenage pregnancy, and poor employment prospects. (fall/spring)

ED 258 ELEMENTS OF LANGUAGE, COMPOSITION, & LITERATURE FOR ELEMENTARY TEACHERS (2)
See EDU 230 Elements of Expression for Elementary Teachers

ED 270 LITERACY, LANGUAGE, & TEXTS (4)
See EDU 233 Literacy, Language, & Texts

ED 276 FIFTH & SIXTH GRADE OBSERVATION (1)
This course is designed to help meet the certification requirement for students completing a 5-12 Secondary Education licensure. A period of 30 hours or one school week is required in the school. The student acts as a teacher’s aide, prepares reports, and consults with the teacher. Prereq: c/dfe. (fall/spring)

ED 277 OBSERVATION & PARTICIPATION (1)
Pre-student teaching laboratory experience in a classroom. A minimum of 30 hours of observation is required. The student observes, acts as a teacher’s aide, prepares reports, and consults with the teacher. Prereq: c/dfe. (fall/spring)

ED 279 CURRICULUM FOR DIVERSE LEARNERS (2)
See EDU 280 Curriculum for Diverse Learners

ED 281 PARTNERSHIPS & COLLABORATION (4)
See EDU 241 Partnerships & Collaboration

ED 283 STRATEGIES FOR TUTORING LANGUAGE ARTS & MATH (3)
This course is a methodology course that helps students learn strategies for tutoring in an education position. Effective instruction in reading, writing, spelling, phonemic awareness, comprehension skills, and math will be discussed and demonstrated. This course requires a 60-hour tutoring experience in a classroom and/or community-based program. Prereq: ED 270 (EDU 233), and either MATH 105 (M 119) or MATH 106 (M 107). (spring)

ED 285 STUDENTS WITH SEVERE DISABILITIES (3)
This course is an in-depth study of the theory, education, and care of students with severe disabilities. Extreme cases of autism, multiple disabilities, emotional disorders, cognitive delay, and physical disabilities will be studied. Appropriate handling techniques, education programs, Mandt Training, and behavior strategies will be stressed. (fall)

ED 289 PARAPROFESSIONAL INTERNSHIP (6)
See EDU 253 Paraprofessional Internship

ED 290 INDEPENDENT STUDY (V 1-4)
See EDU 292 Independent Study

ED 292 INTRODUCTION TO BUSINESS FOR EARLY CHILDHOOD (3)
This course introduces best business practices for home and center-based early childhood programs. Students will draft policy statements, contracts, and financial projections, demonstrate record keeping strategies, anticipate employment and income tax obligations, plan marketing activities, and prepare a simple business plan or a Montana Best Beginnings Provider Grant application. Students will research state, federal, and private programs for improving childcare income and expanding early childhood businesses.

ED 320 EARLY CHILDHOOD CURRICULUM I (2)
Focus will be on curriculum content and methods in the areas of physical activity and physical education, literacy and language, and social studies. Students will develop relevant and meaningful curriculum for young children with an emphasis on assessment and providing for the unique needs of each child. Prereq: ED 144, ED 145, ED 240, and ED 241; or c/i. (spring/odd-numbered years)

ED 321 EARLY CHILDHOOD CURRICULUM I LAB (1)
Implementation of developmentally appropriate activities and projects for young children, which include physical activity and education, literacy and language, and social studies. Prereq: ED 144, ED 145, ED 240, and ED 241; or c/i. $5 Course Fee. (spring/odd-numbered years)

ED 324 EARLY CHILDHOOD CURRICULUM II (2)
Focus will be on curriculum content and methods in the areas of mathematics, science, and the arts. Students will develop relevant and meaningful curriculum for young children with an emphasis on assessment and providing for the unique needs of each child. Prereq: ED 144, ED 145, ED 240, ED 241, ED 320, and ED 321; or c/i. (spring/odd-numbered years)

ED 325 EARLY CHILDHOOD CURRICULUM II LAB (1)
Implementation of developmentally appropriate activities and projects for young children, which include science, mathematics, and the arts. Prereq: ED 144, ED 145, ED 240, ED 241, ED 320, and ED 321; or c/i. $5 Course Fee. (spring/odd-numbered years)

ED 326 INFANT/TODDLER DEVELOPMENT & GROUP CARE (4)
Provides a basic developmental foundation for the student. Examine research, theories, issues, developmental stages and the application of these in relationship to the child from birth to 3 years. Students are required to complete a 45-hour lab component in a licensed/registered facility serving infants/toddlers. (spring)

ED 328 CURRICULUM, INSTRUCTION, ASSESSMENT, & MANAGEMENT (3)
See EDU 382 Assessment, Curriculum, & Instruction (Spring 2011) Teaching candidates will inquire into, think about, and integrate fundamental instructional concepts, principles, and inter-relationships within the context of real-world classroom problems and issues. Basic understanding of curriculum, instructional frameworks, assessment methods, management, and motivation will be explored and demonstrated as candidates develop into reflective professionals. This course is closely linked to INTASC standards governing pedagogy, professionalism, and practice in teaching. The candidate will participate in an interactive classroom environment the content of which focuses on motivating students and encouraging success, and using a variety of instruct-
ED 332 CURRICULUM, INSTRUCTION, ASSESSMENT & MANAGEMENT PRACTICUM (1)
See EDU 382 Assessment, Curriculum, & Instruction (Spring 2011)
Students will explore various issues and concepts relevant to building instructional frameworks with an emphasis in middle school classrooms. Emphasis is on field teaching in small and whole group settings. Making connections between theory and practice in instruction, assessment, management, and motivation is the focus of this experiential course. Prereq: ED 341 and admission to TEP. Coreq: ED 328. (Fall 2010 only; EDU 382 Assessment, Curriculum, & Instruction fall/spring thereafter)

ED 333 TEACHING SCIENCE THROUGH INQUIRY IN THE ELEMENTARY SCHOOL (3)
See EDU 397 Methods: K-8 Science (Fall 2010 only)
See EDU 397 Methods: K-8 Science & Mathematics Inquiry for All Learners (thereafter)

ED 334 TEACHING SOCIAL STUDIES IN THE ELEMENTARY SCHOOL (3)
See EDU 397 Methods: K-8 Social Studies (Fall 2010 only)
See EDU 397 Methods: K-8 Language Arts & Social Studies for All Learners (thereafter)

ED 341 EXCEPTIONAL LEARNER (3)
This course is an introduction to learners with a range of special needs including disabilities, at-risk, gifted, and culturally different. Includes current laws and regulations, identification, services, inclusion, assessment, curriculum, and behavior management issues in the field of special education and as related to general education and special education teachers. A field experience is required. Assessment involves readings, class discussions, papers, presentations, and a field experience report. This is one of the Professional Education courses offered by the Education Department. $20 Course Fee. Prereq: TEP, or c/i. (fall/spring)

ED 342 TEACHING SCIENCE THROUGH INQUIRY IN THE ELEMENTARY SCHOOL PRACTICUM (1)
See EDU 395 Practicum: K-8 Science (Fall 2010 only)

ED 343 PERSONS WITH DISABILITIES (3)
This course is an in-depth study of the characteristics of persons with disabilities. Causes, current issues surrounding the disability, and trends about these disabilities will be discussed in a seminar format. (on demand)

ED 344 EARLY CHILDHOOD PROFESSIONAL (2)
This course focuses on the early childhood profession including awareness of value issues and ethical issues in working with children and their families, legal issues, issues of salary and status, staff relations, and the importance of becoming an advocate for upgrading the profession and improving the services for children. During this AAS capstone course, students complete a comprehensive oral interview, program portfolio, and engage in an advocacy project. Prereq: ED 144, ED 145, ED 240, ED 241, ED 242, ED 243, ED 320, ED 321, ED 324, and ED 325; or c/i. (spring/odd-numbered years)

ED 345 EARLY CHILDHOOD PROFESSIONAL LAB (1)
Students and the instructor will develop an individual training plan with goals and activities based upon the student’s demonstration of competence in working with young children. $5 Course Fee. (spring/odd-numbered years)

ED 346 EARLY LITERACY (3)
Examines language and literacy research including second language acquisition, bilingualism, and sociopolitical contexts of major language groups. Students critique a variety of curriculum models and strategies based upon research, developmental appropriateness, and national and state standards. Based upon these findings, students will design and implement high quality, meaningful, research-based language and literacy experiences and environments in early childhood settings. Prereq: ED 320 and ED 321; or c/i. (fall)

ED 348 MATH & SCIENCE FOR EARLY CHILDHOOD (3)
Focus on developmentally appropriate, research-based curriculum, methods, and assessment in early childhood mathematics and science. Examine the integration of technology, state and national standards, and key concepts and skills into science and math curriculum. Develop and implement high quality, meaningful science and math experiences that focus on hands-on exploration and investigation of meaningful content. Prereq: ED 320, ED 321, ED 324, and ED 325. (fall)

ED 351 SOCIAL ASPECTS OF BEHAVIOR (3)
An introductory study of group processes and collective behavior. (on demand)

ED 352 ENHANCING PHYSICAL SKILLS IN EARLY CHILDHOOD (1)
Examines high quality, meaningful physical activity and physical education experiences across a developmental continuum including discussion of cultural differences and gender expectations. Prereq: ED 320, ED 321, ED 324, and ED 325.

ED 354 FOSTERING SOCIAL COMPETENCE IN THE EARLY YEARS (3)
The course will examine the development, components, and influences of social competence in the early years and explore common social difficulties. Students will develop and implement plans to enhance social competence through examining the contexts for social development, utilizing effective teaching strategies and practices, and strengthening specific components found to relate to social competence. Prereq: ED 240 and ED 241. (spring)

ED 355 METHODS & MATERIALS OF EXPERIENTIAL SCIENCE EDUCATION (4)
See EDU 497 Methods: 5-12 Science

ED 357 METHODS & MATERIALS IN SOCIAL SCIENCE (4)
See EDU 497 Methods: 5-12 Social Studies

ED 370 TEACHING LANGUAGE ARTS & READING WITH CHILDREN’S LITERATURE IN THE ELEMENTARY SCHOOL (3)
See EDU 397 Methods: K-8 Language Arts (Fall 2010 only)
See EDU 397 Methods: K-8 Language Arts & Social Studies (thereafter)

ED 371 LANGUAGE ARTS & READING PRACTICUM (1)
See EDU 395 Practicum: K-8 Reading & Language Arts (Fall 2010 only)

ED 376 ARTS METHODS FOR ELEMENTARY TEACHERS (2)
See EDU 397 Methods: K-8 Art (Fall 2010 only)
See EDU 397 K-8 Integrated Arts for All Learners (thereafter)

ED 377 TEACHING MATHEMATICS IN THE ELEMENTARY SCHOOL (3)
See EDU 397 Methods: K-8 Mathematics (Fall 2010 only)
See EDU 397 Methods: K-8 Science & Mathematics Inquiry for All Learners (thereafter)

ED 378 TEACHING MATHEMATICS IN THE ELEMENTARY SCHOOL PRACTICUM (1)
See EDU 395 Practicum: K-8 Mathematics (Fall 2010 only)
ED 379 MUSIC FOR ELEMENTARY TEACHERS (3)
See EDU 397 Methods: K-8 Music (Fall 2010 only)
See EDU 397 Methods: K-8 Integrated Arts for All Learners (thereafter)

ED 381 INTRODUCTION TO LITERACY ASSESSMENT & INSTRUCTION (3)
See EDU 439 Practicum: Literacy Assessment, Diagnosis, & Instruction

ED 382 LITERACY PRACTICUM: STRUGGLING READERS GRADES 1-4 (1)
See EDU 439 Practicum: Literacy Assessment, Diagnosis, & Instruction

ED 383 APPLICATIONS OF EDUCATIONAL PROBABILITY & STATISTICS FOR ELEMENTARY TEACHERS (1)
See EDU 421 Statistical Procedures in Education

ED 400 COOPERATIVE EDUCATION/INTERNSHIP (V 1-15)
See EDU 498 Internship

ED 409 SEMINAR (V 1-3) R
Selected topics of interest. Prereq: c/i and c/pc. (on demand)

ED 410 GROUP DYNAMICS & LEADERSHIP (2)
Theory and practice of group process and leadership. The skills required for leading meetings, workshops, committees and guidance, training, and self-help groups. (on demand)

ED 419 DIRECTED STUDY (V 1-5)
Selected topics under faculty supervision. Prereq: c/i, c/pc, and c/vc. (on demand)

ED 420 EDUCATIONAL STATISTICS (3)
An introduction to both descriptive and inferential statistics, with an emphasis on educational applications and statistical literacy. Descriptive statistics include measurement of central tendency, variation, and relationship. Inferential statistics include z values, t, F, and chi-square distributions. (on demand)

ED 421 CREATIVITY & THE YOUNG CHILD: EXPLORING REGGIO EMILIA & THE PROJECT APPROACH (3)
Develop and implement methodologies from Reggio and the project approach. Use documentation to develop curriculum, communicate with parents, analyze children’s growth, and celebrate children’s learning. Research and critically analyze a self-chosen topic related to Reggio or the project approach. Field Trip Fee-Varies.

ED 422 FAMILY, COMMUNITIES, CULTURE (3)
See EDU 442 Family, Communities, Culture

ED 424 EARLY CHILDHOOD ASSESSMENT & OUTCOMES (3)
Examines the goals, benefits, limitations, characteristics, and uses of assessment for young children, families, staff, and programs. Explore the relationship between assessment and outcomes, examine and critique different assessment tools and strategies, develop and implement assessment plans, and practice skills in collaboration to form assessment partnerships. Prereq: ED 251. (fall)

ED 425 MULTICULTURAL/GLOBAL EDUCATION (3)
See EDU 311 Cultures, Diversity, & Ethics in Global Education

ED 426 MULTICULTURAL/GLOBAL EDUCATION PRACTICUM (1)
See EDU 311 Cultures, Diversity, & Ethics in Global Education

ED 431 METHODS & MATERIALS FOR STUDENTS WITH LEARNING DISABILITIES & COGNITIVE DELAY (4)
Upon completion of this course, students will have explored and used a variety of instructional strategies, curricula modifications, and adaptations in specific content areas for students with cognitive and learning disabilities. Teacher candidates will recognize and apply curricula decisions that result from formal, authentic, and ecological assessments. Attention will be paid to K-12 special needs students with emphasis given to transitioning high school students to postsecondary life. Field experience required. Prereq: ED 341, and admission to TEP or verification that student is a certified teacher. (Internet only; spring/odd-numbered years, summer/odd-numbered years)

ED 434 MANAGEMENT OF EXCEPTIONAL LEARNERS (4)
Upon completion of the course, students will demonstrate knowledge of classroom management practices that foster learning for exceptional children. Effective practices for students with special needs will be included, with a special emphasis on those with behavioral or emotional disorders. Field experience required. Prereq: ED 341, and admission to TEP or verification that the student is a certified teacher. (Internet only; spring/odd-numbered years, summer/odd-numbered years)

ED 436 ASSESSMENT OF LEARNERS WITH SPECIAL NEEDS (4)
Upon completion of the course, teacher candidates will demonstrate knowledge of the development, administration, and analysis of a variety of assessment tools that lead to informed instructional decisions for students with special needs, the ability to create short-term and long-term plans based on current research, and gain knowledge of the role that culture plays in assessment and instructional planning. Special attention is given to the process of referral under the IDEA regulations. Prereq: ED 341, and admission to TEP or verification that the student is a certified teacher. (Internet only; spring/odd-numbered years, summer/odd-numbered years)

ED 445 METHODS OF TEACHING CONTENT AREA LITERACY (2)
See EDU 481 Content Area Literacy

ED 446 ADVANCED LITERACY ASSESSMENT, DIAGNOSIS, & INSTRUCTION K-12 (3)
See EDU 448 Advanced Literacy Assessment, Diagnosis, & Instruction

ED 447 LITERACY PRACTICUM: ADVANCED LITERACY ASSESSMENT, DIAGNOSIS, & INSTRUCTION K-12 (1)
See EDU 458 Practicum: Advanced Literacy Assessment, Diagnosis, & Instruction

ED 450 RURAL EDUCATION I (2)
Classroom and field exposure to the unique world of the K-8 multi-grade elementary classroom including professional and community resources available, planning curriculum, instruction, and assessment, subject integration, self-directed learning, peer tutoring, and necessary administrative functions of the supervising teacher. (on demand)

ED 451 RURAL EDUCATION II, K-12 (2)
A seminar with guided independent projects designed to enhance the understanding of the interconnectedness of the K-12 rural school and its community and ability to use the resources from both settings to improve the whole. (on demand)

ED 455 CHILD DEVELOPMENT RESEARCH (3)
In-depth examination of current qualitative and quantitative methodology and research relating to child development from prenatal to age 8. Class is taught online in a seminar format. In this course, students develop and share a literature review and facilitate a discussion around their chosen topic. Knowledge of research methodology is also assessed through an exam. Prereq: ED 250 and Junior standing. (spring)

ED 457 COACHING & MENTORING ADULTS (3)
See EDU 447 Coaching & Mentoring Adults

ED 460 PROFESSIONALISM & RESEARCH IN LITERACY EDUCATION (2)
See EDU 489 Research & Professionalism in Literacy Education

ED 461 CAPSTONE LITERACY PRACTICUM: STRUGGLING READERS GRADES K-12 (2)
See EDU 459 Practicum: Capstone Literacy Education
EDU 201 INTRODUCTION TO EDUCATION WITH FIELD EXPERIENCE (4)
Pre-Fall 2010 UMW course: ED 120 Becoming a Professional Educator
The first formal course in the Teacher Education Program, this course provides an introduction to the field of education and the relationships between schools and society. Students begin to evaluate the reasons chosen to become a teacher and the effects that decision will have on their lives. Students examine social, cultural, political, legal, economic, and historical issues within schools and how these issues impact professional educators. During this course, students begin to assemble the professional portfolio, which is a requirement for entry into the Teacher Education Program (TEP). The portfolio will be maintained throughout participation in the Teacher Education Program and is an integral part of the evaluation process. Students will complete a field experience in a school setting. The field experience placement will be made by the Director of Field Experiences. $10 Course Fee. (fall/spring/summer)

EDU 222 EDUCATIONAL PSYCHOLOGY & CHILD DEVELOPMENT (4)
Pre-Fall 2010 UMW course: ED 253 Psychological Foundations of Teaching & Learning
Candidates will explore, compare, contrast, and analyze major psychological theories of development and learning. Teacher candidates will apply these theories to teaching practices. The major progression of physical, social, emotional, moral, and cognitive development and the ranges of individual variation within these domains of development in children from birth to adolescence will be emphasized. The course will emphasize the diversity of all learners with regard to learning styles, multiple intelligences, gender differences, cultural expectations, and exceptionality, as well as teaching approaches to accommodate these differences as well as normal psychological development. $10 Course Fee. (fall/spring)

EDU 230 ELEMENTS OF EXPRESSION FOR ELEMENTARY TEACHERS
Pre-Fall 2010 UMW course: ED 258 Elements of Language, Composition, & Literature for Elementary Teachers
Topics include an introduction to the study of literary devices and style, elements of grammar, usage, and composition, text structures, and organization in writing. The course will include interactive projects and reflective examination of written and oral communication strengths and challenges. (fall/spring)

EDU 233 LITERACY, LANGUAGE, & TEXTS (4)
Pre-Fall 2010 UMW course: ED 270 Literacy, Language, & Texts
Literacy growth begins before children enter school as they experience and experiment with literacy activities—reading, writing, and associating spoken words with their graphic representations. The course will focus on the understanding of a comprehensive literacy curriculum that makes productive use of the literacy abilities that children of all ages bring to school as well as the multiple ways in which literacy is represented in our lives, texts, culture, and perceptions of the world. Required for Elementary Education Major and Literacy Minor. Prereq: ED 210 (EDU 234).

EDU 234 READING & WRITING CONNECTIONS FOR ALL LEARNERS K-8 (4)
What happens when young readers write? What happens when young writers read? Using a reading and writing workshop model designed for the K-8 setting, students in this course will be immersed in authentic, process-based experiences in responding to, analyzing, and writing about texts that are commonly used in the elementary and middle school settings. The central experiential learning outcome of this course will be an understanding of the complex ways in which the reading process supports development of writing skills, while immersion in the writing process in turn supports development of reading proficiency. Emphasis will be placed on the composing process, and students will write for a wide range of purposes. Students will carefully examine methods for the development and support of an understanding of grammar and writing conventions, in elementary age students, and in
EDU 241 PARTNERSHIPS & COLLABORATION (4)

Pre-Fall 2010 UMW course: ED 281 Partnerships & Collaboration
This course investigates the relationships that exist between professionals, parents, and outside agencies. Students will learn to work effectively with teachers, principals, paraprofessionals, other school personnel, parents, and agencies. Communication skills, collaboration, and professionalism will be stressed to promote harmonious working conditions to benefit students with differences. (fall)

EDU 253 PARAPROFESSIONAL INTERNSHIP (6)

Pre-Fall 2010 UMW course: ED 289 Paraprofessional Internship
This course is the incorporation of an appropriate work experience into the student’s academic preparation. The student will develop a learning contract with his/her instructor, maintain a portfolio of his/her work experience, and make a final presentation of his/her portfolio/internship experience to the Education faculty. The course requires a minimum of 40 hours of appropriate work experience for each credit earned. Prereq: Sophomore standing and c/i. (fall/spring)

EDU 263 METHODS OF TEACHING GRAMMAR (2)

Pre-Fall 2010 UMW course: ED 210 Methods of Teaching Grammar
This course is designed for students who anticipate teaching grammar in elementary or secondary English and Language Arts classrooms. Upon completion of this course, students will be familiar with modern English grammar and sentence structure, literary devices, text structure and organization, methods of incorporating grammar instruction in the context of writing, and evaluating grammar in student writing. (spring)

EDU 280 CURRICULUM FOR DIVERSE LEARNERS (2)

Pre-Fall 2010 UMW course: ED 279 Curriculum for Diverse Learners
Upon completion of this course, students will have explored and used a variety of instructional strategies, curricula modifications, and adaptations for specific content areas, as well as formulating student management approaches for individuals with diverse special needs. Students will also recognize and apply curricula decisions that are the result of formal authentic and ecological assessments. Discussion, lecture, and participation course. Competency-based assessment. (spring)

EDU 292 INDEPENDENT STUDY (V 1-4)

Pre-Fall 2010 UMW course: ED 290 Independent Study
Directed research or study on an individual basis. Prereq: c/i, c/pc, and c/vc. (fall/spring)

EDU 306 SCHOOL LAW & ADVOCACY FOR ALL K-12 LEARNERS (4)

Candidates develop understanding of the rights and responsibilities of all stakeholders in the education of diverse students in public education: parents, educators, community, and children. Candidates analyze key legislative mandates, such as Title I, No Child Left Behind, and the Individuals with Disabilities Education Act, and their implications for and impact on K-12 schools. In particular, candidates examine the uses of assessment in schools. Candidates examine seminal legislation such as the Civil Rights Act of 1965 and its application to education; the processes of the judicial system and the implications of landmark litigation, such as Brown v Board of Education, Tinker v Des Moines, Rowley v Board of Education, and Everson v Board of Education. Assessment is based on exams, research papers, and case studies. Prereq: Admission to TEP, c/dic; taken concurrent with or in the semester prior to student teaching. (fall/spring/summer)

EDU 311 CULTURES, DIVERSITY, & ETHICS IN GLOBAL EDUCATION (4)

Pre-Fall 2010 UMW courses: ED 425 Multicultural/Global Education, and ED 426 Multicultural/Global Education Practicum
This is a survey course to acquaint the student with the cultural foundations of education. Special emphasis is given to the multicultural and global dimensions of education. In addition, students study educational outcomes for American Indian students. High dropout rates, over-representation in special education, substance abuse, teenage pregnancy, and poor prospects for employment are endemic in this population of students. This course meets the Montana Law MCA 20-1-501 requirements. This course requires a field experience practicum of 4 or 5 days during which candidates engage in observation and practice teaching in Native American reservation schools and evening activities. Takes place in a diverse setting where exceptionalism is present. Assessment is based on projects, reports, exams, and field work. Field Trip Fee-Varies. Prereq: Admission to TEP. (fall/spring/summer)

EDU 340 CLASSROOM MANAGEMENT (4)

Pre-Fall 2010 UMW courses: ED 328 Curriculum, Instruction, Assessment, & Management, and ED 329 Curriculum, Instruction, Assessment, & Management Practicum
Teacher education candidates examine research on classroom management, with emphasis on strategies for positive student interaction and motivation, positive behavioral interventions, and principles of universal design for learning. Candidates develop and implement Action Research. A two-week field experience in a public school setting is incorporated within the course. Candidates will remain in the field experience school for the full school day. Assessment is based on exams, a classroom management plan, self-reflections of a videotaped lesson, Action Research, and professional observation form. Prereq: Admission to TEP; course taken in semester prior to student teaching. (fall/spring)

EDU 341 POSITIVE DISCIPLINE & CHILD DEVELOPMENT (4)

Candidates develop skills for establishing a positive social environment in elementary school classrooms. Candidates will demonstrate understanding of child development as it relates to positive guidance techniques, enhancing children’s self-concept, and developing children’s pro-social skills, with a special emphasis on developing these skills in young children. A two-week field experience in an early childhood or primary school setting is required. Candidates will remain in the school throughout the school day. Candidates are assessed using observation forms, exams, lesson plans, and journals. Prereq: Admission to TEP or permission of Early Childhood Education Program. (fall/spring)

EDU 370 INTEGRATING TECHNOLOGY INTO EDUCATION (4)

Pre-Fall 2010 UMW course: ED 234 Technology for Elementary Teachers
This hands-on course is designed to prepare elementary teachers and paraprofessionals with skills and activities that can be integrated with other areas of instruction. Students will be creating technology-oriented activities to use with elementary school children. Special emphasis will be given to communication, production, and technology integration in the curriculum. Activities will also be designed to develop problem-solving and decision-making skills in elementary school children. $10 Course Fee. Prereq: Passing score on UMW Information Technology & Literacy Exam or COMS 115; and ED 120 (EDU 201). (fall/spring)

EDU 382 ASSESSMENT, CURRICULUM, & INSTRUCTION (4)

Pre-Fall 2010 UMW courses: ED 328 Curriculum, Instruction, Assessment, & Management, and ED 329 Curriculum, Instruction, Assessment, & Management Practicum
Teacher education candidates examine educational research on effective strategies for instruction and assessment in K-12 classrooms, including principles of universal design for learning, Action Research, and Response to Intervention (RTI). Candidates develop lessons that demonstrate professional skills in instructional design and assessment, aligned with standards for K-12 students. Candidates examine school curricula and classroom resources. Candidates develop a working knowledge of descriptive statistics and probability in relationship to
standardized testing used in educational settings. Assessment is based on lesson plans, integrated unit plan, assessment design, exams, and professional observation form. $10 Course Fee. Prereq: ED 120 (EDU 201), and ED 253 (EDU 222). (ED 328/329 Fall 2010; EDU 382 beginning Spring 2011)

EDU 385 MATHEMATICS FOR K-8 SCHOOLS WITH PEDAGOGY I (4)
Developing mathematical thinking in K-8 students, part I. Candidates examine the research on teaching and learning mathematics. Candidates develop skills in and strategies for assisting children to develop problem-solving and computation skills, number sense and number concepts, and meanings for the operations. Candidates develop skills in assisting children to work with real and rational numbers, place value, mental computation and estimation, fractions, decimals, percents, ratio, proportion, probability, statistics, algebra, functions, and variables. Prereq: ED 328 (EDU 382), and Admission to TEP. Must pass a mathematics assessment. (fall/spring)

EDU 386 MATHEMATICS FOR K-8 SCHOOLS WITH PEDAGOGY II (4)
Developing mathematical thinking in K-8 students, part II. Candidates examine the research on teaching and learning mathematics. Candidates develop skills in and strategies for assisting children to develop two- and three-dimensional geometric thinking, measurement, and logical reasoning. Prereq: Admission to TEP and EDU 385.

EDU 395 PRACTICUM: MULTICULTURAL/GLOBAL EDUCATION (1)
Pre-Fall 2010 UMW course: ED 426 Multicultural/Global Education Practicum This course requires a field experience practicum of 4 or 5 days during which candidates will be engaged in observation and practice teaching in Native American reservation schools and evening activities. Takes place in a diverse setting where exceptionality is present. Field Trip Fee-Varies. Prereq: Admission to TEP. Coreq: ED 425 (EDU 311). (Fall 2010 only)

EDU 395 PRACTICUM: K-8 MATHEMATICS (1)
Pre-Fall 2010 UMW course: ED 378 Teaching Mathematics in the Elementary School Practicum Students will spend 15 hours in various field experiences related to the content and context of ED 377 (EDU 397 Methods: K-8 Mathematics). Content focus will be on field implementation of methods and materials of mathematical instruction appropriate to the development of the K-8 educator. $15 Course Fee. Prereq: MATH 105 (M 119), MATH 106 (M 107), ED 328, ED 341, and admission to TEP. Coreq: ED 377 (EDU 397 Methods: K-8 Mathematics). (Fall 2010 only)

EDU 395 PRACTICUM: K-8 READING & LANGUAGE ARTS (1)
Pre-Fall 2010 UMW course: ED 371 Language Arts & Reading Practicum This course provides supervised experience in an elementary literacy setting drawing from current research and national standards in literacy education about connecting field experiences to university instruction. Application of “culturally responsive teaching and learning” is emphasized. Required for Elementary Education Major. Prereq: ED 270 (EDU 231), and admission to TEP or verification that student is a certified teacher. Coreq: ED 370 (EDU 397 Methods: K-8 Language Arts). (Fall 2010 only)

EDU 395 PRACTICUM: K-8 SCIENCE (1)
Pre-Fall 2010 UMW course: ED 333 Teaching Science Through Inquiry in the Elementary School Practicum Students will spend 15 hours in various field experiences related to the content and context of ED 332 (EDU 397 Methods: K-8 Science). Content focus will be on field implementation of methods and materials in all areas of science instruction appropriate to the development of the K-8 educator. Prereq: ED 328, ED 341, and admission to TEP. Coreq: ED 332 (EDU 397 Methods: K-8 Science). (Fall 2010 only)

EDU 395 PRACTICUM: K-8 SOCIAL STUDIES (1)
Pre-Fall 2010 UMW course: ED 335 Teaching Social Studies in the Elementary School Practicum Candidates will know, understand, and use the major concepts of social studies instruction in a K-8 classroom. Course content will focus on creating instructional frameworks for the integrated study of social sciences, history, geography, and other related areas. Prereq: ED 328, ED 341, and admission to TEP. Coreq: ED 334 (EDU 397 Methods: K-8 Social Studies). (Fall 2010 only; EDU 397 Methods: K-8 Language Arts & Social Studies for All Learners fall/spring thereafter)

EDU 397 METHODS: K-8 INTEGRATED ARTS FOR ALL LEARNERS (4)
Pre-Fall 2010 UMW course: ED 376 Arts Methods for Elementary Teachers, and ED 379 Music for Elementary Teachers Teacher Education candidates develop knowledge of and experience with effective methods, techniques, and materials for teaching visual arts, drama, and music to children as part of an integrated curriculum in the elementary grades. Candidates engage in creative and critical experiences with the arts. They design integrated arts instruction while learning how to document and assess student progress. Candidates work directly with children in microteaching or field experience. $15 Course Fee. Prereq: Admission to TEP, must have completed courses in two different forms of artistic expression from: ART 101, DR 101 (THTR 101), MUS 101 (MUSI 103), FA 101, or 2 credits of any MUS 116 (MUSI 114), MUS 316 (MUSI 314), MUS165 (MUSI 147), or MUS 365 (MUSI 312), or HHP 205 (DANC 285) and HHP 206 (DANC 286). (fall/spring)

EDU 397 METHODS: K-8 LANGUAGE ARTS (4)
Pre-Fall 2010 UMW course: ED 370 Teaching Language Arts & Reading with Children’s Literature in the Elementary School Developmentally appropriate practice for teaching reading and writing in the elementary school will be addressed. Various methods and strategies for literacy learning will be discussed as candidates learn to plan and organize a balanced literacy program with a special focus on children’s literature, multiple texts, the arts, and technologies. Thematic instruction in conjunction with content reading and writing workshop with a literature-based emphasis will focus the course; however, other interactive methods and strategies will be introduced. The use of multiple resources for inquiry, teaching, and learning within inclusive classrooms will be explored. Extensive exploration of genre, history, and theme in children’s literature will be maintained throughout the course. $20 Course Fee. Prereq: ED 270 (EDU 233), and admission to TEP or verification that student is a certified teacher. Coreq: For Elem Ed majors--ED 371 (EDU 395 Practicum: K-8 Reading & Language Arts). (Fall 2010 only; EDU 397 Methods: K-8 Language Arts & Social Studies for All Learners fall/spring thereafter)

EDU 397 METHODS: K-8 LANGUAGE ARTS & SOCIAL STUDIES FOR ALL LEARNERS (4)
Pre-Fall 2010 UMW courses: ED 370/371 Teaching Language Arts & Reading with Children’s Literature in the Elementary School/Practicum, and ED 334/335 Teaching Social Studies in the Elementary School/Practicum Candidates will demonstrate knowledge of the major concepts of social studies and language arts instruction in a K-8 classroom. Candidates will demonstrate skills in using developmentally appropriate practices to ensure that all students can learn in a positive environment. Candidates will incorporate social studies and language arts within lesson plans, while creating instructional frameworks for the integrated study of other subjects. Through micro-teaching or field experience, candidates demonstrate skills in teaching children how to read and write, with a focus on developing in children the joy of learning. Candidates demonstrate skills in using a variety of methods and strategies for literacy development, including the development of literacy for second language learners. Candidates learn to plan a balanced literacy program that includes integrated, thematic instruction. Multicultural topics, including issues and concepts relevant to Native American history and culture, citizenship, and guided decision-making are included. Candidates are assessed through development of lesson plans and a unit
plan, designed to ensure that students with diverse learning needs are successful. Other assessments include quizzes, candidate-developed assessments, peer teaching, observations of teaching K-8 children, and portfolio items. Candidates’ professional skills and dispositions are also assessed using an observation form. $10 Course Fee. Prereq: ED 270 (EDU 233), and admission to TEP. (Spring 2011; fall/spring thereafter)

**EDU 397 METHODS: K-8 MATHEMATICS (4)**

Pre-Fall 2010 UMW course: ED 377 Teaching Mathematics in the Elementary School
Candidates will explore, design, implement, and evaluate instructional materials for K-8 mathematics instruction. Content, methods, and materials for teaching mathematics through inquiry and experientially-oriented programs are emphasized. Infused topics include technology, cooperative learning, assessment, and multicultural issues. This course assesses candidate knowledge and concentrates on mathematics knowledge and methods needed by elementary candidates for integrating mathematics into the elementary education curriculum. Prereq: MATH 105 (M 119), MATH 106 (M 107), ED 328 (EDU 382), ED 341, and admission to TEP. Coreq: ED 378 (EDU 395 Practicum: K-8 Mathematics). (Fall 2010 only; EDU 397 Methods: K-8 Science & Mathematics Inquiry for All Learners fall/spring thereafter)

**EDU 397 METHODS: K-8 SCIENCE (4)**

Pre-Fall 2010 UMW course: ED 332 Teaching Science Through Inquiry in the Elementary School
Candidates will develop science instruction and assessments for K-8 science instruction that are aligned with state and national standards. Candidates will gain familiarity with instructional methods and materials appropriate for teaching science content and science process skills, primarily through science inquiry and experiential learning. Candidates will develop skills in incorporating into their science instruction physical science, earth and space science, and life science. Infused topics include technology, science safety, cooperative learning, assessment, environmental education, and multicultural issues. Candidates will develop skills in integrating science and technology throughout the elementary curriculum. $10 Course Fee. Prereq: ED 328 (EDU 382), ED 341, and admission to TEP. Coreq: ED 333 (EDU 395 Practicum: K-8 Science). (Fall 2010 only; EDU 397 Methods: K-8 Science & Mathematics Inquiry for All Learners fall/spring thereafter)

**EDU 397 METHODS: K-8 SCIENCE & MATHEMATICS INQUIRY FOR ALL LEARNERS (4)**

Pre-Fall 2010 UMW courses: ED 332/333 Teaching Science Through Inquiry in the Elementary School/Practicum, and ED 377/378 Teaching Mathematics in the Elementary School/Practicum
Candidates develop K-8 science and mathematics instruction and assessment frameworks for the integrated study of other related areas (U.S. history, geography, world history, and economics while creating instructional content and problem-solving skills, primarily through science inquiry and experiential learning. Candidates develop skills in integrated instruction, incorporating mathematics, physical science, earth and space science, and life science. Infused topics include technology, lab safety, cooperative learning, assessment, environmental education, and Indian Education for All. Students will demonstrate skills working with children in field experiences or micro-teaching related to science and mathematics instruction. $10 Course Fee. Prereq: Admission to TEP. (Spring 2011; fall/spring thereafter)

**EDU 421 STATISTICAL PROCEDURES IN EDUCATION (1)**

Pre-Fall 2010 UMW course: ED 383 Applications of Educational Probability & Statistics for Elementary Teachers
The course covers basic content related to descriptive statistics and probability. The student will learn how to collect, organize, represent, and interpret data using tables, graphs, charts, and mathematical models. Upon completion of the course, the student will demonstrate understanding and application of the concepts of mean, mode, median, standard deviation, counting techniques, and probability distributions. Prereq: MATH 105 (M 119), MATH 106 (M 107), and admission to TEP. (fall/spring)

**EDU 438 LITERACY ASSESSMENT, DIAGNOSIS, & INSTRUCTION (3)**

Pre-Fall 2010 UMW course: ED 381 Introduction to Literacy Assessment & Instruction
An introduction to informal and formal reading and writing assessments and instructional strategies to accommodate variations in the K-8 literacy program. Students will learn how to modify instruction strategies to meet the needs of struggling readers and writers as well as those who are in need of motivation and greater reading challenges. Course requires readings, assessment projects, tutoring, and informal evaluations of literacy growth. Required for Elementary Education Major and Literacy Minor. $15 Course Fee. Prereq: Admission to TEP or verification that student is a certified teacher; for Elem Ed majors—ED 270 (EDU 233). Coreq: ED 382 (EDU 439). (fall/spring)

**EDU 439 PRACTICUM: LITERACY ASSESSMENT, DIAGNOSIS, & INSTRUCTION (1)**

Pre-Fall 2010 UMW course: ED 382 Literacy Practicum: Struggling Readers Grades 1-4
Taken in conjunction with ED 381 (EDU 438), this course provides supervised introductory assessment, diagnosis, and tutoring experience in an elementary literacy setting drawing from current research and national standards in literacy education. It is recommended that students complete this practicum with a struggling reader grades 2-4. Application of “culturally responsive teaching and learning” is emphasized. Coreq: ED 381 (EDU 438). (fall/spring)

**EDU 442 FAMILY, COMMUNITIES, CULTURE (3)**

Pre-Fall 2010 UMW course: ED 422 Family, Communities, Culture Examines characteristics, research, and theories on families and communities including socioeconomic conditions, family structures, relationships, stresses, supports, home language, cultural values, ethnicity, community resources, cohesiveness, and organization influences. Prereq: ED 240 and ED 241, or c/i. (fall)

**EDU 447 COACHING & MENTORING ADULTS (3)**

Pre-Fall 2010 UMW course: ED 457 Coaching & Mentoring Adults
Examines adult learning theory, supervisory and mentoring models, adult development, stages in teacher development, and effective mentoring and coaching skills. Students will practice mentoring skills including relationship building, observation and conferencing, assessing early childhood skills, knowledge, and dispositions, and planning and implementing effective training sessions. Prereq: ED 144, ED 240, ED 242, ED 250, ED 320, ED 324, and ED 344; or c/i. (spring)

**EDU 448 ADVANCED LITERACY ASSESSMENT, DIAGNOSIS, & INSTRUCTION (3)**

Pre-Fall 2010 UMW course: ED 446 Advanced Literacy Assessment, Diagnosis, & Instruction K-12
This is an advanced assessment class that will explore theories of literacy variabilities and the various forms of literacy assessment and instruction appropriate for K-12 classroom and clinical situations. Standardized tests, performance-based assessment, portfolios, and multiple forms of informal assessments will be examined. Candidates
will apply their knowledge through participation in writing and conducting a case study through tutoring. Required for the Literacy Minor. Prereq: ED 381 (EDU 438), ED 382 (EDU 439), and admission to TEP or verification that student is a certified teacher. Coreq: ED 447 (EDU 458). (fall)

**EDU 499 INQUIRY, TEACHING, & LEARNING (2)**

Pre-Fall 2010 UMW course: ED 499 Inquiry, Teaching, & Learning

This course focuses on evaluating teaching performance and has the advantage of illuminating what expert teachers do and how they use knowledge to support student learning. This clarifies the nature of highly accomplished practice and the purposes of teacher learning and development. This course offers student teachers who have completed their classroom experience the opportunity to discuss, assess, and evaluate their own teaching performance according to INTASC standards—standards which today guide professional expectations and goals of teachers. Prereq: Admission to Student Teaching. (fall/spring)

**EDU 458 PRACTICUM: ADVANCED LITERACY ASSESSMENT, DIAGNOSIS, & INSTRUCTION (1)**

Pre-Fall 2010 UMW course: ED 447 Literacy Practicum: Advanced Literacy Assessment, Diagnosis, & Instruction K-12

Taken concurrently with ED 446 (EDU 448), this course provides intensive, supervised tutoring experience in a grade 5-12 literacy setting drawing from current research and national standards in literacy education. Application of “culturally responsive teaching and learning” is emphasized. Required for the Literacy Minor. Prereq: ED 381 (EDU 438), ED 382 (EDU 439), and admission to TEP or verification that student is a certified teacher. Coreq: ED 446 (EDU 448). (fall)

**EDU 459 PRACTICUM: CAPSTONE LITERACY EDUCATION (2)**

Pre-Fall 2010 UMW course: ED 461 Capstone Literacy Practicum: Struggling Readers Grades K-12

Taken concurrently with ED 460 (EDU 489), this course provides an intensive, supervised inquiry experience in either an elementary or secondary school setting. Grounded in current research and national standards in literacy education, this course requires candidates to volunteer, observe, and conduct informal research in a classroom setting. Major focus is on “culturally responsive teaching and learning.” Coreq: ED 460 (EDU 489). (spring)

**EDU 481 CONTENT AREA LITERACY (2)**

Pre-Fall 2010 UMW course: ED 445 Methods of Teaching Content Area Literacy

Developmentally appropriate practice and literature for teaching reading and writing in the middle and high school will be addressed to include the study of language, oral, visual, and written literacy, print and non-print media, and technology. Various methods and strategies for teaching comprehension, reading, writing, and study skills will be examined across the 5-12 curriculum. Admission to TEP or verification that student is a certified teacher. (fall/spring)

**EDU 489 RESEARCH & PROFESSIONALISM IN LITERACY EDUCATION (2)**

Pre-Fall 2010 UMW course: ED 460 Professionalism & Research in Literacy Education

This is a capstone course in literacy education that will provide methods and tools for continuing professional development of the teaching candidate. The student will choose a particular literacy focus and develop an action research project to be presented to others as a seminar or conference, also planned and implemented as a course requirement. The focus may be on literacy in the school or literacy in the community. Other research methods and resources will be explored, particularly in relation to scientifically-based methods of reading instruction. Highly participatory and interactive course in which students volunteer to work in either an elementary or secondary classroom. Required for the Literacy Minor. Prereq: ED 446 (EDU 448), ED 447 (EDU 458), and admission to TEP or verification that student is a certified teacher. Coreq: ED 461 (EDU 459). (spring)

**EDU 492 INDEPENDENT STUDY (V 1-4)**

See ED 490 Independent Study

Directed research or study on an individual basis. Prereq: c/i, c/pc, and c/vc. (fall/spring)

**EDU 495 STUDENT TEACHING: K-8 (V 2-15) R**

Pre-Fall 2010 UMW course: ED 472 Student Teaching-Elementary

A full-time supervised clinical practicum at a school location approved by the Director of Field Experiences. A seminar at the university campus is incorporated near the completion of student teaching. Number of days for student teaching varies based on the candidate’s particular combination of endorsement areas. Evaluation of student teaching is based on various evaluation and observation forms, and the Phase III portfolio. Prereq: Admission to Student Teaching and c/d/cf. (fall/spring)

**EDU 495 STUDENT TEACHING: 5-12 (V 2-15) R**

Pre-Fall 2010 UMW course: ED 473 Student Teaching-Secondary

A full-time supervised clinical practicum at a school location approved by the Director of Field Experiences. A seminar at the university campus is incorporated near the completion of student teaching. Number of days for student teaching varies based on the candidate’s particular combination of endorsement areas. Evaluation of student teaching is based on various evaluation and observation forms, and the Phase III portfolio. Prereq: Admission to Student Teaching and c/d/cf. (fall/spring)

**EDU 497 METHODS: 5-12 MATHEMATICS (4)**

2009-10 UMW course: M 341 Methods & Materials in Mathematics

Pre-Fall 2009 UMW course: MATH 351 Methods & Materials in Mathematics

Upon successful completion of this course, the student should be familiar with current trends in the methods and materials used for effective teaching of mathematics. The student should exhibit competence in developing unit and lesson plans, expository and inquiry-based instruction, forms of professional development, theories of instruction, the appropriate use of technologies in instruction, skills in effective communication with students and peers on mathematical and professional educator topics. Professional education field experience in a school required. Prereq: TEP and MATH 341 (M 329) grade C- or higher; or c/i. (spring)

**EDU 497 METHODS: 5-12 SCIENCE (4)**

Pre-Fall 2010 UMW course: ED 355 Methods & Materials of Experiential Science Education

Students will develop an understanding of the theory and practice of secondary science teaching and will apply that knowledge to the secondary education classroom and outdoor learning environments. Students will develop skills in planning instruction and designing classroom environments that incorporate science inquiry, laboratory safety, environmental science, performance-based assessment, and cooperative learning. Students will develop skills in aligning instruction and assessment with state and national standards. Professional education field experience in a school required. $25 Course Fee. Prereq: Admission to TEP. Preferably, students will take this course in the semester prior to student teaching. (fall)
EDU 497 METHODS: 5-12 SOCIAL STUDIES (4)  
Pre-Fall 2010 UMW course: ED 357 Methods & Materials in Social Science  
Students will understand and apply methods, materials, and state and national standards in teaching the social sciences as recommended by the National Council for the Social Studies. Activities and assessment include microteaching, field experience, teacher, instructor, and peer critiques, analysis essays, in-class writings, oral presentations, readings, demonstrations, using primary sources, writing integrated, thematic units and lesson plans, critiquing methodologies and textbooks, applying history workshop concepts, and using technology. Professional education field experience in a school required. Prereq: Admission to TEP. (fall)

EDU 498 INTERNSHIP (V 2-12)  
Pre-Fall 2010 UMW course: ED 400 Cooperative Education/Internship, ED 475 Teaching Internship, and ED 476 Licensure Internship  
Work closely with the UMW Department of Education Director of Field Experiences to develop the criteria for the internship, and complete the paperwork for the internship contract. The internship is used for three categories of students:

(1) Students who wish to complete an appropriate internship/work experience as part of their degree may complete a one-semester internship, number of credits to be determined in consultation with the Director of Field Experiences.

(2) Candidates who are pursuing a teaching license and already have a non-teaching degree from an accredited college. These candidates must have completed a major that is suitable for teaching licensure in Montana and is an approved teaching major at UMW. Candidates may have more than one teaching major or minor, but must have at least one teaching major. They must have been admitted to the UMW Teacher Education Program; have obtained a Class 4 or Class 5 license in the field for which they are seeking program completion; and have an offer for employment, or currently are employed, in an appropriate K-12 setting in the licensure field. These candidates must enroll in 4 credits of supervised internship every semester (with a minimum of two semesters) until all program requirements are met. Prereq: c/dfe. (fall/spring/summer)

(3) Teachers who already hold a Class 1 or Class 2 Montana teaching license and wish to add an additional endorsement. Teachers must complete the course requirements for the teaching major or minor, and will substitute the internship for student teaching. The teacher must enroll in 4 credits of supervised internship every semester (with a minimum of two semesters) until all program requirements are met. Prereq: c/dfe. (fall/spring/summer)

Note: New OCHE Common Course Numbering system rubrics and courses are displayed in italics throughout this Catalog.

ENGLISH (ENG)  
[For OCHE equivalent courses effective Fall 2009, see appropriate rubric & course listed beneath individual courses]

ENG 102 FOUNDATIONS OF LANGUAGE (4)  
See WRIT 101 College Writing I

ENG 112 PERFORMING LITERARY TEXTS (4)  
This course analyzes the study and practice of a wide variety of oral communication modes, with particular emphasis on oral interpretation of literary texts. Primary topics include analysis of literary modes and styles, communication objectives of the writer and of the speaker, audience analysis, adaptation of texts, and intellectual and emotional interpretation. Practical skills are taught: vocal production, facial and body expression, sense-memory, visualization techniques, and strategies to lessen and control performance anxiety. The course reviews some traditions of oratory, public reading, storytelling, and drama including Western and non-Western traditions. Teaching and learning activities include occasional lecture, speaking-listening exercises and imagination-building games, rehearsal techniques, oral presentations of published and self-written texts, performance analyses.

ENG 162 FOLK & FAIRY TALES (4)  
See LIT 162 Folk & Fairy Tales

ENG 163 FANTASY & SCIENCE FICTION (4)  
See LIT 163 Fantasy & Science Fiction

ENG 166 LITERATURE & POLITICS (4)  
See LIT 166 Literature & Politics

ENG 167 LITERATURE & GENDER (4)  
See LIT 167 Literature & Gender

ENG 168 LITERATURE & THE ENVIRONMENT (4)  
See LIT 168 Literature & The Environment

ENG 169 LITERATURE AS POPULAR CULTURE (4)  
See LIT 169 Literature as Popular Culture

Students with scores within ranges indicated below may be admitted to 200-level English courses prior to taking ENG 102 (WRIT 101), or with consent of instructor (c/i):

- 10-12 on the Writing Subscore or an equivalent score on the Combined English/Writing section of the Optional Writing Test of the ACT; or
- 10-12 on the Essay or an equivalent score on the Writing Section of the SAT; or
- 5-6 on the Montana University System Writing Assessment; or
- 4-5 on the AP English Language or English Literature Examination.

All students are required to successfully complete ENG 102 (WRIT 101) or its equivalent for General Education credit.

ENG 204 CREATIVE WRITING WORKSHOP (4)  
The student will be introduced to a variety of creative writing genres including but not exclusive to fiction, nonfiction, scriptwriting/playwriting, and poetry. The course will include the reading of texts in the various areas. Prereq: ENG 102 (WRIT 101), or c/i. (fall/spring)

ENG 215 JOURNALISM (4)  
Study of news reporting, writing, and editing of news and feature stories. Production, layout, advertising, circulation, and production and procedures for publication of a school newspaper are also covered. Regular class hours are augmented by hands-on experiential laboratory periods as part of the actual newspaper publication schedule. Prereq: ENG 102 (WRIT 101), or c/i. (fall)

ENG 216 JOURNALISM (4)  
News reporting and the writing of various kinds of news stories and feature articles, news editing, the study and publication of a school paper. Regular class hours are supplemented by laboratory, experientially-based periods in connection with the campus newspaper. Prereq: ENG 102 (WRIT 101), or c/i. (spring)
ENG 219 DIRECTED STUDY (V 1-5)
Selected topics under faculty supervision. Prereq: c/i, c/pc, and c/vc. (fall/spring)

ENG 263 EARLY AMERICAN VOICES (4)
See LIT 210 American Literature I

ENG 264 AMERICAN ROMANCE (4)
See LIT 264 American Romance

ENG 265 REALISTS, NATURALISTS, MODERNISTS (4)
See LIT 265 Realists, Naturalists, Modernists

ENG 266 GENERATIONS & CONFLICTS (4)
See LIT 266 Generations & Conflicts

ENG 273 THE ORAL TRADITION (4)
See LIT 273 The Oral Tradition

ENG 274 THE MANUSCRIPT TRADITION (4)
See LIT 274 The Manuscript Tradition

ENG 275 THE PRINT CULTURE (4)
See LIT 275 The Print Culture

ENG 276 THE DECLINING EMPIRE (4)
See LIT 276 The Declining Empire

ENG 279 FUNDAMENTALS OF LITERARY THEORY (4)
See LIT 300 Literary Criticism

ENG 280 VISIONS OF AMERICA (4)
See LIT 280 Visions of America

ENG 290 INDEPENDENT STUDY (V 1-4)
Directed research or study on an individual basis. Prereq: c/i, c/pc, and c/vc. (fall/spring)

Department recommendation: students registering for any 300- or 400-level English course be sophomores in good standing, or receive c/i.

ENG 301 POETRY WORKSHOP (4)
A writing workshop that focuses on the techniques of writing poetry. This course will involve the critical analysis of students’ writing as well as reading and discussing the genre under study. Prereq: ENG 204, or c/i. (fall)

ENG 302 FICTION WORKSHOP (4)
A writing workshop that focuses on the techniques of writing fiction. This course will involve the critical analysis of students’ writing as well as reading and discussing the genre under study. Prereq: ENG 204, or c/i. (spring)

ENG 303 NONFICTION WORKSHOP (4)
A writing workshop that focuses on the techniques of writing nonfiction. This course will involve the critical analysis of students’ writing as well as reading and discussing the genre under study. Prereq: ENG 204, or c/i. (spring)

ENG 313 WRITING FOR PUBLICATION (4)
See WRIT 313 Writing for Publication

ENG 314 EDITORIAL WORKSHOP (4)
A workshop in which students will gain expertise in the various different skills required by the publishing industry, such as editing, organizing circulation, advertising, desktop publishing, and acquiring submissions. (spring)

ENG 320 LITERATURE IN TRANSLATION (4)
See LIT 302 Literature in Translation

ENG 330 MYTHOLOGY (4)
See LIT 385 Mythology

ENG 339 LITERARY REGIONS (4)
See LIT 339 Literary Regions

ENG 350 TECHNICAL & PROFESSIONAL COMMUNICATIONS (4)
See WRIT 321 Advanced Technical Writing

ENG 351 TEACHING COMPOSITION & LITERATURE (4)
This course gives students both theory and experience in teaching English/language arts and focuses on the integration of listening, speaking, reading, and writing. Students are expected to demonstrate their understanding through lesson planning/microteaching, projects, and other assignments. The course includes lecture, group discussions, and cooperative learning. Professional education field experience in a school required. Prereq: Admission to TEP. (fall)

ENG 352 METHODS OF TEACHING COMPOSITION (4)
This course gives students both theory and experience in teaching English language arts and focuses on strategies for teaching Montana Content Standards in writing. Students are expected to demonstrate their understanding through lesson planning, microteaching, projects, and other assignments. The course includes lecture, group discussions, and cooperative learning. Professional education field experience in a school required. Prereq: TEP. Coreq: ENG 353 in same semester. (fall)

ENG 353 METHODS OF TEACHING LITERATURE (4)
This course gives students both theory and experience in teaching English language arts and focuses on integrating strategies for teaching Montana Content Standards in literature, reading, speaking and listening, and media literacy. Students are expected to demonstrate their understanding through lesson planning, microteaching, projects, and other assignments. The course includes lecture, group discussions, and cooperative learning. Professional education field experience in a school required. Prereq: TEP. Coreq: ENG 352 in same semester. (fall)

ENG 361 POETRY & THOUGHT (4)
See LIT 361 Poetry & Thought

ENG 362 SEMINAR IN WOMEN'S LITERATURE (4)
See LIT 335 Women & Literature

ENG 400 COOPERATIVE EDUCATION/INTERNSHIP (V 1-15)
Incorporates an appropriate work experience into students’ academic preparation. Students apply their knowledge and skills in professional settings under supervision. Prereq: Senior standing and c/i. (fall/spring)

ENG 401 ADVANCED POETRY WORKSHOP (4)
This course encourages students to continue their study of poetry writing, leading them to define their poetic voices while providing them with a ground within the poetic tradition upon which to build and experiment. This course will involve students in lecture, group discussions, and readings. Prereq: ENG 301, or c/i. (fall)

ENG 402 ADVANCED FICTION WORKSHOP (4)
This course encourages students to continue their study of fiction writing, leading them to refine their work in narrative, dialogue, character development, plot, etc., while providing them with a ground within the tradition of fiction writing upon which to build and experiment. Prereq: ENG 302, or c/i. (spring)

ENG 403 ADVANCED NONFICTION WORKSHOP (4)
This course encourages students to continue their study of nonfiction writing, leading them to refine their prose while providing them a ground within the tradition of nonfiction writing upon which to build
and experiment. Students will be involved in group readings and discussions of the works under study. Prereq: ENG 303, or c/i. (spring)

ENG 499 SEMINAR (V 1-4)
See LIT 494 Seminar/Workshop

ENG 413 HISTORY, STRUCTURE, & NATURE OF LANGUAGE (4)
Introduction to the principles of linguistics and examination of the evolution and characteristics of the English language and human languages in general, with particular attention to semantics and major revisions of American English. Instruction will be a combination of lecture, group discussion, and other experiential activities. (spring)

ENG 419 DIRECTED STUDY (V 1-5)
Selected topics under faculty supervision. Prereq: c/i, c/pc, and c/vc. (on demand)

ENG/DR 441 DRAMA HISTORY & LITERATURE GENRE (4)
See LIT 441 Drama History & Literature Genre

ENG 452 SEMINAR IN LITERARY PERIOD (4) R
See LIT 494 Seminar: Literary Period

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ENVIRONMENTAL SCIENCE (ENVS)
[For OCHE equivalent courses effective Fall 2010, see appropriate rubric & course listed under individual courses.]

ENVS 101 CAREER ORIENTATION FOR WILDLANDS GUIDES (1)
A look at professional opportunities as a naturalist, back country guide, and outfitter business person in both the public and private sector. A preview of the training needed for these professions. The course results in the completion of the 5 core courses of the Professional Guide Institute (origins and mission of the background guide, our wildland heritage, back country leadership, wildlands interpretation, and outfitter operations). Performance-based assessment. (fall)

ENVS/HHP 150 BASIC ROCK CLIMBING (1)
This field-based introductory course is designed for students who desire to learn the basic techniques of rock climbing. Students will learn fundamental safety techniques for climbing, care and handling of the rope, basic knots, use of climbing harnesses, basic belaying techniques, communication between climbing partners, basic rappelling, and basic climbing techniques. Evaluation is based upon participation and performance. $35 Course Fee. (fall)

ENVS 180 APPLIED SUSTAINABLE LANDSCAPE HORTICULTURE (4)
This primarily field-based class will allow students to study and practice the way human beings—as individuals and societies—can participate in the creation of ethical and ecological support systems. The course is designed to introduce students to the scientific principles of sustainable landscape design and horticulture. Students will become integrated in the campus gardening and compost project where their research and findings will become part of a long-term experiment monitoring and testing microbial succession and species composition of soil used in the garden. Students will be evaluated through the application of quizzes, exams, group and individual projects. (fall/even-numbered years)

ENVS/PHIL 201 HISTORY & PHILOSOPHY OF SCIENCE (4)
See PHL 241 History & Philosophy of Science

ENVS 219 DIRECTED STUDY (V 1-5)
Selected topics under faculty supervision. Prereq: c/i, c/pc, and c/vc. (fall/spring)

ENVS 260 WILDLANDS SKILLS (2) R-8
Each specific topic taught in this field-based course will concentrate on a particular skill related to education, recreation, lore, or survival in wildlands. The skill areas offered may include backpacking, basic camping, campfire programs, horsepacking, mountaineering, night sky interpretation, primitive living skills, rock climbing, white water boating, wilderness medicine, winter camping, or others. The student will gain knowledge of equipment, techniques, and processes for exploring our wild places. Emphasis is on low impact use of wildlands resources. Courses include a practicum. $75 Course Fee. (fall/spring)

ENVS 269 WILDLANDS SKILLS: MAP, COMPASS, & GPS (2)
Students will develop skills in map reading, use of a magnetic compass, altimeters, and Global Position System (GPS) receivers. Students will learn to describe a position by use of Latitude and Longitude, Universal Transverse Mercator, and U.S. Public Land Survey grid systems. Students will apply learned GPS skills to execute traverses of land parcels and determine the location of private and public land ownerships. Students will develop skills in CD-Rom map programs and the downloading of GPS receiver waypoints and traverses onto CD-Rom maps. Learned skills will be practiced on local field trips. $35 Course Fee.

ENVS 280 ENVIRONMENTAL INTERPRETATION I (4)
The purpose of this course is to define, describe, and expand “interpretation” as a communication process in environmental education. Students will practice preparing and delivering interpretive programs that are enjoyable, thematic, organized, and relative, balance the scientific bases of such programs with the artistic delivery of the same programs rendering them “compelling”; recount measures by which the interpre-tive process might impact the very resource areas that the same educa-tional process was designed to protect, and explain how the instruction of what is in the environment might lead the learner to love and protect that environment. Students will be assessed through 3 short oral interpretive talks, exams, essay, and an interpretive group project. Prereq: BIO 112 (BIOB 170) and BIO 270 (BIOE 250). (fall)
ENVS 290 INDEPENDENT STUDY (V 1-4)
Directed research or study on an individual basis. Prereq: c/i, c/pc, and c/vc. (fall/spring)

ENVS 329 NATURAL RESOURCE ISSUES (4)
Students in this course will be investigating current natural resource issues of the northwestern United States, as well as global natural resource issues. Students will explore the philosophical, ecological, economic, educational, cultural, and recreational values that affect human perceptions of these complex issues through a series of required readings, in-class discussions, and student projects/presentations. Guest speakers will be invited to share their views on particular issues and to answer questions from students. Students will also be exposed to national environmental policy and law. Course will emphasize hands-on activities and field trips. Evaluation will be based on classroom discussions, issue analysis reports, and papers on resource issues. Prereq: BIO 270 (BIOE 250), CHEM 131 (CHMY 141), and GEOL 150 (GEO 103); or c/i. (spring)

ENVS 348 SOIL SCIENCE (4)
This course introduces students to soils and their properties as components of landscapes and ecosystems. Students study the interaction of the basic soil-formation parameters: geologic materials, climate, biological components, land surface, and time. Lectures, labs, and research activities focus on soil-forming processes, soil morphology, soil classifications, soil engineering properties, natural soil landscapes, and soil nutrient cycling. A large part of the class involves field examination, description, and classification of soils and their landscapes. Students will demonstrate their understanding of the material in exams, research reports, lab and field activities, and a major field project applying soils knowledge to a problem in environmental sciences. $40 Course Fee. Prereq: demonstrated math ability at MATH 007 or higher, and either CHEM 101 (CHMY 121) or CHEM 131 (CHMY 141), and either BIO 101 (BIOB 160), or BIO 111 (BIOB 170), and either GEOL 101 (GEO 101) or GEOL 150 (GEO 103); or c/i. (spring/odd-numbered years)

ENVS 372 OUR WILDLAND HERITAGE (4)
This course will trace the history of the public concern for the loss of natural lands (wilderness) and follow the development of the Wilderness Act of 1964 in the United States and its content including limitations and opportunities. The course includes an inventory and profile of the public land use agencies (U.S. Forest Service, National Park Service, U.S. Fish & Wildlife Service, and Bureau of Land Management) as well as operation and ethics regarding private natural lands. Students will be able to complete an “Operating Plan” for public and private land use cooperatively with land managers, produce a “risk management” plan for land use leading groups, and produce equipment, meal, and personnel requirement lists for effective group land use.

ENVS 381 NATURAL RESOURCE LAW (4)
The student will be introduced to the federal and state constitutional issues, statutes, regulations, and legal practices involved with environmental laws. Specific constitutional provisions and federal and state statutes will be examined in depth. The course will develop the necessary information and applications required by current practitioners, land owners, or citizens involved in environmental stewardship management. Students will demonstrate their learning by successful completion of exams and research papers and in-class discussions of readings. Prereq: Junior/Senior standing. (on demand)

ENVS 384 GEOGRAPHIC INFORMATION SYSTEMS WORKSHOP (2)
This class will serve as a broad introduction to using the industry-standard ArcGIS geographic information systems software available on campus. In the computer lab, students will complete a professor-guided tutorial program on the use of the software, learn additional enriching applications, participate in discussions related to GIS applications in field sciences, and apply what they learn to a group project in the environmental sciences. The class will have a field component in which students will use GPS technology to collect data and work with it in GIS format. Assessment will be based on successful completion of the tutorial program and participation in the discussions and applied project. Participants who successfully complete the workshop will receive an ESRI Certificate of Completion. Pass/Fail. (spring/odd-numbered years)

ENVS 400 COOPERATIVE EDUCATION/INTERNSHIP (V 1-15)
Incorporation of an appropriate work experience into the student’s academic preparation. Prereq: Junior/Senior standing, c/i, c/pc, and c/vc. (fall/spring)

ENVS 419 DIRECTED STUDY (V 1-5)
Selected topics under faculty supervision. Prereq: c/i, c/pc, and c/vc. (on demand)

ENVS 429 ENVIRONMENTAL FIELD STUDIES (4)
Students taking this field-based class will work as a team to design and perform field research and produce written and oral reports concerning a research, natural resource inventory, and/or environmental assessment problem. A multi-disciplinary approach to problem solving is incorporated. Student evaluation will be based on quantity and quality of personal contribution to the project effort, ability to function in a team environment, peer review, effectiveness of field approach, and demonstrations of written and oral communication skills. May have a service learning component. $75 Course Fee. Prereq: MATH 232 (STAT 217) and Junior/Senior standing; or c/i. (fall)

ENVS 441 SUSTAINABLE RESOURCE MANAGEMENT (4)
This course introduces students to ecosystem management principles and practices where interactions of social, economic, and ecological components of natural resources are addressed to attain true sustainability. Students will explore and examine partnerships within communities, public agencies, and private sectors and essential technologies. This course is intended to serve as a catalyst for change in how natural resources are managed. Students will demonstrate their learning by successful completion of examinations and research papers, class discussions, and participation in a community-based project. Prereq: Junior/Senior standing. (spring/even-numbered years)

ENVS 452 ENVIRONMENTAL EDUCATION (4)
This course is designed for students interested in outdoor and environmental education. Students will learn the history of and approaches to experiential and environmental education. Through readings, class discussions, and experiential class activities and field trips, students will develop an appreciation for the nature of environmental education as well as the importance of the connection between humans and their environment. Through class projects, discussions, and writing assignments, students will demonstrate their ability to develop a sense of connection with their environment and the natural world around them and to help instill this in others. $25 Course Fee. Prereq: c/i. (fall)

ENVS 480 ENVIRONMENTAL INTERPRETATION II (4)
Students will further develop their skills to become professional environmental interpreters. In this class students will examine key examples of the literature of environmental interpretation and the contributions of selected, significant naturalists from the late 18th century to present. In addition, this course teaches advanced creative approaches to methods for establishing effective programming featuring environmental themes. It addresses specific techniques for diverse audiences, especially those fostering science education, natural history, wildlife, and ecology topics. Students will be assessed through a 45-minute oral interpretive talk based on a shadowing experience that takes place throughout the block and a large group interpretive project. Prereq: ENVS 280. (spring)

ENVS 490 INDEPENDENT STUDY (V 1-4)
Directed research or study on an individual basis. Prereq: c/i, c/pc, and c/vc. (fall/spring)
ENVS 495 INTERNSHIP/THESIS PRESENTATION (1)
Students will prepare and deliver a professional public presentation outlining their work on either an internship or senior thesis. This presentation will generally be performed at the annual campus research symposium, or occasionally at another professional venue as approved by the student’s advisor. In order to prepare for their public presentation, students must attend a minimum of eight (8) UMW "On the Rocks" colloquia prior to their presentation. Pass/Fail. Prereq or Coreq: ENVS 400 or ENVS 498.

Note: New OCHE Common Course Numbering system rubrics and courses are displayed in italics throughout this Catalog.

EQUINE STUDIES (EQST)

EQST 101 INTRODUCTION TO EQUINE STUDIES (4)
This course gives the student an overview of the equine world that will provide a basis for subsequent more practical and scientifically-based courses. This class will look at the evolution and behavior of the horse, the history of horsemanship, contemporary breeds and their uses, selection of an appropriate horse (including conformation and pre-purchase examinations), and insights into various career avenues within the equine industry.

EQST 102 EQUINE SELECTION & JUDGING (4)
This course is divided into two segments covering Western and English riding, respectively. The class will cover basic conformation while stressing the importance of form to desired function. The students will learn judging methods and procedures for the various types of Western and English classes, professional conduct at horse shows, and other related topics.

EQST 155 INTRODUCTION TO NATURAL HORSEMANSHIP: GAINING CONFIDENCE & RESPECT (3)
The student will gain an understanding of the basic concepts of natural horsemanship first in groundwork, and then riding. Using a natural approach, the student will learn and implement a number of basic maneuvers to gain the horse’s respect and confidence from the ground. These activities will increase the student’s awareness of safety issues around horses and will increase the student’s ability to read the horse’s body language. The student will begin to understand the importance of feel, timing, and balance when working with horses. The student will learn safe and efficient saddle techniques and how to safely mount the horse. In the saddle, the student will learn the fundamentals of rein position and will practice control of the horse in the gaits of walk and trot. Students will be assessed on their mastery and competency of covered topic material by in-class participation and discussion, written assignments, a research presentation, a mid-term test, and a comprehensive final exam. Prereq: EQST 101, or c/i. (fall)

EQST 202 BASIC EQUINE SCIENCE I (4)
In this two-course series, the student will learn the fundamentals of equine anatomy, physiology, and diseases using a step-wise systems approach. The normal anatomy and physiology of each system of the horse are covered initially, and then basic pathologic concepts and important diseases of each system are investigated. This first of the two-part series will cover the body as a whole, and then look in more detail at the musculoskeletal system, cardiovascular system, hematopoietic system, respiratory system, and digestive system. $20 Course Fee. Prereq: BIO 101 (BIOB 101) or BIO 111 (BIOB 160), and EQST 201; or c/i. (fall)

EQST 203 BASIC EQUINE SCIENCE II (4)
In this two-course series, the student will learn the fundamentals of equine anatomy, physiology, and diseases using a step-wise systems approach. The normal anatomy and physiology of each system of the horse are covered initially, and then basic pathologic concepts and important diseases of each system are investigated. This second part of the two-part series will cover the nervous system, endocrine system, urogenital system, integumentary system, special senses, and the basics of equine genetics and reproduction. $20 Course Fee. Prereq: BIO 101 (BIOB 101) or BIO 111 (BIOB 160), and EQST 202; or c/i. (spring)

EQST 204 EQUINE FACILITIES MANAGEMENT (4)
In this capstone course, the student will learn the principles of developing, managing, and operating an equine facility utilizing knowledge that they have gained in the prerequisite courses. Topics will include the proper layout of facilities, building restrictions, permits, zoning laws, construction materials for barns and fences, parasite control, manure management and disposal, ventilation, transportation access, and employee management decisions, along with other closely related topics. Lectures will be supported and enhanced by class discussion, guest speakers, hands-on laboratories, and field trips when possible. Students will be assessed on their mastery and competency over covered topic material by in-class and lab participation and discussion, written assignments, a research presentation, a mid-term test, and a comprehensive final exam. Prereq: EQST 101, EQST 201, EQST 202, and EQST 203; or c/i.

EQST 219 DIRECTED STUDY (V 1-4)
Selected topics under faculty supervision. Prereq: Sophomore standing, c/i, c/p/c, and c/vc. (on demand)
EQST/HHP 222 ELEMENTS OF RODEO (2)
The Elements of Rodeo courses focus on National Intercollegiate Rodeo Association (NIRA) events: bareback riding, steer wrestling, saddle bronc riding, tie-down roping, team roping, goat tying, breakaway roping, and barrel racing. Rules governing a selected event, techniques of competition, and responsibilities of NIRA athletes are presented. Students will apply fitness and wellness concepts, injury prevention measures, basic injury care, and winning physical and mental strategies to human and equine athletes competing in the event. (fall/spring)

EQST 252 NATURAL HORSEMANSHIP: BUILDING A RELATIONSHIP (3)
In this course, the student will learn how to get the horse to respond at a new level. In EQST 155, the goal was to develop respect and confidence. Students will refine that respect and confidence to build a connection that will be tested by work at liberty (without a lead and halter). The student will develop more feel, better timing, and more harmony with the horse. The student will learn about impulsion and how to use reins less and the seat more while in the saddle. Students will be assessed on their mastery and competency of covered topic material by in-class participation and discussion, written assignments, a research presentation, a mid-term test, and a comprehensive final exam. In addition to mastery of the theory and ideology of natural horsemanship, students must also demonstrate their competency and mastery of covered techniques by their correct application of skills sets with their horse, both on-the-ground and under saddle. Prereq: EQST 155, and horse evaluation; or c/i.

EQST 254 NATURAL HORSEMANSHIP: HARMONY WITH YOUR HORSE I (3)
The primary objective of this course will be to take the skills and knowledge learned in EQST 155 and 252 and further develop these skills so that the horse and the human achieve positive reflexes. Students will progress to using a higher level of communication on the ground and see more of the relationship from ground to saddle. In the saddle, students will get harmony with the horse and gain knowledge of a horse’s self-carriage and impulsion. The student will learn impulsion programs and the different patterns of different gaits. Students will also learn about the importance of “seat connection” while riding a horse and the importance of rein and feet connection. Students will be assessed on their mastery and competency of covered topic material by in-class participation and discussion, written assignments, a research presentation, a mid-term test, and a comprehensive final exam. In addition to mastery of the theory and ideology of natural horsemanship, students must also demonstrate their competency and mastery of covered techniques by their correct application of skills sets with their horse, both on-the-ground and under saddle. Prereq: EQST 252, or c/i.

EQST 255 NATURAL HORSEMANSHIP: HARMONY WITH YOUR HORSE II (3)
Entering into this course, a student should have a thorough understanding of and have competent abilities both on-the-ground and in the saddle. The student will advance the skills, confidence, and respect gained on the ground by creating a stronger lead rope-to-feet connection. In the saddle, the horse and rider will develop more emotional collection, improving impulsion and self-carriage in all three gaits. The combination of the increased ground connection developed through increased harmony between the horse and rider will prepare them for the next level of refinement. Students will be assessed on their mastery and competency of covered topic material by in-class participation and discussion, written assignments, a research presentation, a mid-term test, and a comprehensive final exam. In addition to mastery of the theory and ideology of natural horsemanship, students must also demonstrate their competency and mastery of covered techniques by their correct application of skills sets with their horse, both on-the-ground and under saddle. Prereq: EQST 254, or c/i.

EQST 290 INDEPENDENT STUDY IN NATURAL HORSEMANSHIP (V 1-4)
This course allows the student to focus on a contemporary area of interest in the natural horsemanship area. The emphasis of the course will be on experiential learning. Students are expected to critically evaluate, analyze, and synthesize selected topics through authorship of an extensive course paper requiring independent research skills. Prereq: Sophomore standing, c/i, c/pc, and c/vc.

EQST 344 EQUINE EXERCISE PHYSIOLOGY & CONDITIONING PROGRAMS (4)
In this knowledge-based course, the student will learn the fundamentals of equine exercise physiology and how it relates to equine conditioning programs. The students will use their previously gained knowledge of anatomy, physiology, nutrition, and horse care as the foundation of knowledge for this course. This course will prepare students to develop equine conditioning programs that will be suitable for many types, breeds, and ages of horses. Lectures, discussions, videos, live horse demonstrations, and hands-on labs with live horses will all be utilized in this course. Students will be assessed on their mastery and competency over covered topic material by in-class lab participation and discussion, written assignments, a research presentation, a mid-term test, and a comprehensive final exam. $10 Course Fee. Prereq: EQST 101, EQST 201, EQST 202, EQST 203, EQST 204, and either EQST 255 or c/i.

EQST 346 EQUINE REPRODUCTIVE MANAGEMENT (4)
In this course, the student will learn the fundamentals of equine reproduction and management. Topics covered will include the physiology, behavior, and nutrition of reproduction, assisted reproductive techniques, mare and stallion management, perinatal mare and foal care, equine fertility assessment (stallions and mares), abortion causes and prevention, hormone therapy to enhance and manipulate conception and pregnancy, nutrition of growth, and barren mare management. Discussion of current trends and research in equine reproduction will also occur. Field trips and hands-on laboratories to enhance and supplement learning from class lectures and discussions will be scheduled when possible. Students will be assessed on their mastery and competency over covered topic material by in-class and lab participation and discussion, written assignments, a research presentation, a mid-term test, and a comprehensive final exam. $25 Course Fee. Prereq: EQST 101, EQST 201, EQST 202, EQST 203, and EQST 204; or c/i. (spring)

EQST 351 NATURAL HORSEMANSHIP: REFINING THE FOUNDATION I (4)
In this course, the student uses skills including seat connection and impulsion patterns gained in EQST 155 through 255 to focus toward refinement and suppleness. At this level, the student will gain more control of the horse’s body and feet while maintaining softness through the reins. The goal of the next two courses is for the student to continuously refine the foundation to allow for lateral movements, vertical flexion, impulsion, and rein-to-feet connection. Students will be assessed on their mastery and competency of covered topic material by in-class participation and discussion, written assignments, a research presentation, a mid-term test, and a comprehensive final exam. In addition to mastery of the theory and ideology of natural horsemanship, students must also demonstrate their competency and mastery of covered techniques by their correct application of skills sets with their horse, both on-the-ground and under saddle. Prereq: EQST 255, or c/i.

EQST 352 NATURAL HORSEMANSHIP: REFINING THE FOUNDATION II (4)
This course brings together the skills and knowledge gained in all previous natural horsemanship courses. The student and horse are now achieving a solid level of communication both on-the-ground and in the saddle. This communication continues to be more refined, and the high level of confidence and respect between the horse and the student becomes evident. Upon completion of this course, the student and horse have all the ingredients of mental, emotional, and physical collection that is the foundation of horsemanship. The solid foundation will enable the student and horse to progress into whatever facet of horsemanship is...
EQST 369 HERD HEALTH MANAGEMENT PRACTICUM (V 1-4) (R)
In this practicum course, students will practice the fundamentals of daily equine herd health care and management that they have learned in the prerequisite EQST courses in an equine facility under appropriate supervision. This practicum is designed to assist students to take that necessary step from the classroom to the real world and to learn to apply the knowledge that they have gained in a commercial equine herd setting. The practicum is intended to increase awareness and preparedness for the daily routines that occur with horses in large herds, as well as to provide students with daily hands-on experience with dealing with illness, injury, lameness, and a wide variety of normally occurring events on a horse facility, such as visits by the veterinarian, farrier, prospective buyers, etc. This course will need to be set up with the Practicum Coordinator the semester prior to when the student wants to participate in this course. Students will be assessed on their mastery, competency, and implementation of required knowledge and skill sets through daily participation and discussion, written assignments, a formal presentation of their experiences, and formal assessment by their immediate practicum supervisor. Prereq: Junior standing, EQST 101, EQST 201, EQST 202, EQST 203, and EQST 204 (EQST 401 recommended), and c/i. (fall/spring/summer)

EQST 400 NATURAL HORSEMANSHIP INTERNSHIP (4)
This field experience provides a broader application of the techniques of natural horsemanship courses to a professional setting. Students work under the guidance of an equine professional with the support of a university faculty supervisor. Students will complete a series of written periodic reports and a portfolio in the form of a final comprehensive report on their experience. 40 hours of contact (work) for each hour of semester credit awarded. $10/Credit Course Fee. Prereq: Senior standing, c/i, c/pc, and c/vc. (fall/spring/summer)

EQST 401 ADVANCED HORSE CARE & NUTRITION (4)
This is a knowledge-based course that is intended to broaden the student’s understanding of a horse’s health and welfare as it pertains to advanced topics in nutrition, dentistry, hoof care, shoeing and lameness, parasitology, infectious and non-infectious diseases, as well as closely related topics. This course builds upon the material that was taught as a foundation in prerequisite EQST courses. This course will assist a student in developing the knowledge required to calculate and formulate nutritional feeding programs for horses, including those with systemic, genetic, or metabolic disorders. As it directly relates to nutrition, dentistry will be covered in detail, with discussion of various dental problems and solutions, along with learning how to estimate the age of horses by recognizing changes in dentition as the horse becomes older. Students will also increase their awareness of biosecurity and isolation procedures in cases of infectious or contagious diseases, and will learn the importance of proper vaccination protocols, and current parasitology diagnostic and treatment methods. Other related topics will be covered as time allows. Hands-on laboratories, class discussions, guest speakers, and field trips will be utilized to supplement the lectures. Students will have articles to read and summarize, hands-on laboratory reports, a mid-term test, a major research project and PowerPoint presentation, and a final exam as knowledge assessments. Students will be assessed on their mastery and competency over covered topic material by in-class and lab participation and discussion, written assignments, a research presentation, a mid-term test, and a comprehensive final exam. $25 Course Fee. Prereq: Junior standing, EQST 101, EQST 201, EQST 202, EQST 203, and EQST 204.

EQST 404 CONTEMPORARY ISSUES & ETHICS IN THE EQUINE INDUSTRY (4)
In this course, students will learn to apply the integrated business skills gained during their academic classes, along with knowledge of contemporary issues and current affairs in the equine industry, to an equine business setting. Some of the topics to be covered may include strategic vision, ranch or equine facility management, ethics and issues of breeding, buying or selling, or competing with horses, contemporary or current political issues regarding horses or their use, sales and marketing, and client and public relations, as well as others as time allows. Students will have the opportunity to do research on a current or contemporary issue regarding horses and their management, and then compile that research into an evaluated presentation that details how that issue will affect the ownership of horses or the management of an equine business. Further student evaluation will be obtained through written assessments, participation in lab, lecture or internet discussions, and a final exam. Prereq: Senior standing, or c/i.

EQST 409 SEMINAR (V 1-4)
Selected topics of interest, with emphasis on experiential learning. Prereq: EQST 255 and c/i (demonstrated ability).

EQST 419 DIRECTED STUDY (V 1-4)
Selected topics under faculty supervision, with emphasis on experiential learning. Prereq: c/i, c/pc, and c/vc. (on demand)

EQST 453 YOUNG HORSE STARTING & DEVELOPMENT (4)
This course involves the fundamentals of handling young horses from basic ground skills through initial rides under saddle and introduction to the snaffle bit. The horses used may range in age from two- to three-year-olds, and will have had little to no handling. This course requires a strong base of knowledge and skills gained in the previous Natural Horsemanship courses (EQST 155 to 352). There are two options for this course. The first option is that the student can do both the ground and saddle work; the second option will be for students that just want to do the ground work. The decision will be left to the instructor to make. Working with young horses is a challenge, but rewarding; the horse will test the student’s previous knowledge and experience in natural horsemanship. Progression and introduction of new tasks and skills sets in this course will be dependent upon performance and ability of both horse and student (with safety an important factor) as assessed by course instructors. Students will be assessed on their mastery and competency of covered topic material by in-class participation and discussion, written assignments, a research presentation, a mid-term test, and a comprehensive final exam. In addition to mastery of the theory and ideology of starting and developing young horses, students must also demonstrate their competency, mastery, and positive progression through appropriate on-ground and under saddle skills sets at a level suitable to both horse and rider. Prereq: EQST 352, or c/i.

EQST 454 EQUINE BEHAVIOR & THE DEVELOPMENT OF NATURAL HORSEMANSHIP (4)
In this capstone course, students will examine the fundamental behavioral characteristics of the horse and recognize how they are utilized in the theory of natural horsemanship. Students will have the opportunity to explore the history and development of natural horsemanship through the study of leading clinicians in the field. The practical application of these theories will enable the graduate to identify normal and abnormal equine behaviors, and design learning and living environments that promote optimum mental and physical health for their equine partners. Students will be assessed on their mastery and competency over covered topic material by in-class and lab participation and discussion, written assignments, a research presentation, a mid-term test, and a comprehensive final exam. Prereq: EQST 204, or c/i.

EQST 490 INDEPENDENT STUDY (V 1-4)
This advanced course allows the student to focus on a contemporary area of interest in the natural horsemanship area. The horsemanship of the course will be on experiential learning. Students are expected to critically evaluate, analyze, and synthesize selected topics through
authorship of an extensive course paper requiring independent research skills. Prereq: EQST 244, c/i, c/pc, and c/vc.

**EQST 498 SENIOR THESIS (2)**
This course is intended as a culminating intellectual experience for the natural horsemanship degree. Working with a faculty advisor, the student will produce a thesis and an oral presentation on a topic related to natural horsemanship or a similar discipline that demonstrates a competent, independent application of basic research skills and a familiarity of the pertinent literature. Prereq: Senior standing, c/i, c/pc, and c/vc.

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### FINE ARTS (FA)

**FA 101 INTRODUCTION TO VISUAL & PERFORMING ARTS (4)**
Students explore visual arts, music, drama/theatre, and dance with some attention to literature and applied arts. Students read, view, listen, and participate in the arts, learning fundamental vocabulary and concepts, and discussing such questions as: what are the arts; how are the arts created; how and what do arts communicate; and how do the arts reflect society? The depth and quality of their arts observations and reflections, both written and oral, are assessed. $15 Course Fee. (fall/spring)

**FA 219 DIRECTED STUDY (V 1-5)**
Selected topics under faculty supervision. Prereq: c/i, c/pc, and c/vc. (fall/spring)

**FA 290 INDEPENDENT STUDY (V 1-4)**
Directed research or study on an individual basis. Prereq: c/i, c/pc, and c/vc. (fall/spring)

**FA 301 CONTEMPORARY ARTS ISSUES (4)**
Students explore concerns shared in all of the arts—e.g., the artist and sources of inspiration; artistic freedom; arts as a mirror of society and an influencing force; who’s to judge; cutting edge technology; commercialism. Topics are presented in seminar fashion. Significant works of art are analyzed within their cultural and societal context. Students exhibit knowledge and competencies through a variety of writings, presentations, and discussions.

**FA 400 COOPERATIVE EDUCATION/INTERNSHIP (V 1-15)**
This option is intended to provide students with an opportunity to incorporate an appropriate extended field experience into their academic program. Prereq: PHIL 101 (PHL 101), c/i, c/pc, and c/vc. (fall/spring)

**FA 419 DIRECTED STUDY (V 1-5)**
Selected topics under faculty supervision. Prereq: c/i, c/pc, and c/vc. (on demand)

**FA 490 INDEPENDENT STUDY (V 1-4)**
Directed research or study on an individual basis. Prereq: c/i, c/pc, and c/vc. (fall/spring)

**FA 498 SENIOR PROJECT/THESIS (V 1-15)**
An individual project or thesis closely associated with the student’s academic program and career goals. Student works with one selected faculty member. Prereq: Senior standing, c/i, c/pc, and c/vc. (fall/spring)

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### GEOGRAPHY (GEOG)

[For OCHE equivalent courses effective Fall 2009, see appropriate rubric & course listed under individual courses]

**GEOG 102 HUMAN GEOGRAPHY (4)** *(CD)*
See GPHY 121 Human Geography

**GEOG/ECON/POLS 201 THE WORLD ECONOMY (4)**
See ISSS 201 The World Economy

**GEOG 202 REGIONAL GEOGRAPHY OF NORTH AMERICA (4)** *(CD)*
See GPHY 246 Geography of North America

**GEOG 219 DIRECTED STUDY (V 1-4)**
Selected topics under faculty supervision, with emphasis on experiential learning. Prereq: c/i and c/vc. (fall/spring)

**GEOG 290 INDEPENDENT STUDY (V 1-4)**
See GPHY 292 Independent Study

**GEOG 305 CULTURAL & SOCIAL GEOGRAPHY (4)**
See GPHY 325 Cultural Geography

**GEOG 400 COOPERATIVE EDUCATION/INTERNSHIP (V 3-12)**
See GPHY 498 Internship/Cooperative Education/Omnibus

**GEOG 409 SEMINAR (4)**
See GPHY 494 Seminar/Workshop

**GEOG 419 DIRECTED STUDY (V 1-4)**
Selected topics under faculty supervision, with emphasis on experiential learning. Prereq: c/i and c/vc. (on demand)

**GEOG/POLS 441 WORLD RESOURCES (4)**
See ISSS 441 World Resources

**GEOG 490 INDEPENDENT STUDY (V 1-4)**
See GPHY 492 Independent Study

**GEOG 498 SENIOR PROJECT/THESIS (V 4-12)**
See GPHY 499 Senior Project/Thesis
GEOGRAPHY (GPHY)
[New OCHE rubric effective Fall 2009]

GPHY 121 HUMAN GEOGRAPHY (4) (CD)
Pre-Fall 2009 UMW course: GEOG 102 Human Geography
Provides an introduction to the major themes of human geography including settlement, culture, economic, and political organizations, and human-nature relationships. The course also provides a general introduction to understanding maps and demographic features (e.g., population growth). Issues of cultural diversity—with special focus on indigenous peoples—both within American society and across the world will be emphasized. Students will demonstrate understanding of course content through in- and out-of-class writing assignments. Lecture and group discussion. (online: fall/spring)

GPHY 246 GEOGRAPHY OF NORTH AMERICA (4) (CD)
Pre-Fall 2009 UMW course: GEOG 202 Regional Geography of North America
Provides an introduction to the themes of American and Canadian regional geography including environmental, political, linguistic, economic, social diversity, and spatial relationships. Special emphasis will be given to coverage of the native peoples of North America. Students will demonstrate understanding of course content through in- and out-of-class writing assignments. Lecture and group discussion. (on demand)

GPHY 290 UNDERGRADUATE RESEARCH (V 2-8)
Selected topics under faculty supervision. Prereq: c/i, c/pc, and c/vc. (on demand)

GPHY 292 INDEPENDENT STUDY (V 1-4)
Pre-Fall 2009 UMW course: GEOG 290 Independent Study
Selected topics under faculty supervision, with emphasis on experiential learning. Prereq: c/i, c/pc, and c/vc. (on demand)

GPHY 294 SEMINAR/WORKSHOP (V 1-4)
Pre-Fall 2009 UMW course: GEOG 409 Seminar
Selected topics of interest. Prereq: c/i. (on demand)

GPHY 325 CULTURAL GEOGRAPHY (4)
Pre-Fall 2009 UMW course: GEOG 305 Cultural & Social Geography
This course examines how social and cultural interactions and development are spatially constructed. Major themes include gender and sexuality in space, wealth and urban development, landscapes of consumption, spaces of resistance, and ideas of wilderness. Seminar. (on demand)

GPHY 490 UNDERGRADUATE RESEARCH (V 2-8)
Selected topics under faculty supervision. Prereq: c/i, c/pc, and c/vc. (on demand)

GPHY 492 INDEPENDENT STUDY (V 1-4)
Pre-Fall 2009 UMW course: GEOG 490 Independent Study
Advanced directed research or study, with emphasis on experiential learning. Students are expected to critically evaluate, analyze, and synthesize selected topics through authorship of an extensive course paper requiring independent research skills. Prereq: GEOG 102 (GPHY 121), and either ANTH/HIST/POLS/PSY/SOC 220, or ANTH/HIST/POLS/PSY/SOC 221, or ANTH/HIST/POLS/PSY/SOC 222, or ISSS 222; and c/i, c/pc, and c/vc. (on demand)

GPHY 494 SEMINAR/WORKSHOP (V 1-4)
Pre-Fall 2009 UMW course: GEOG 409 Seminar
Selected topics of interest. Prereq: Junior standing and c/i. (on demand)

Note: New OCHE Common Course Numbering system rubrics and courses are displayed in italics throughout this Catalog.

GEOLOGY (GEO)
[New OCHE rubric effective Fall 2009]

A prerequisite for any course with a GEO rubric is documented mathematical ability equivalent to MATH 007 Algebra/M 095 Intermediate Algebra. Ability can be demonstrated by appropriate college credit, ACT/SAT Math score, or UMW Math Placement Exam score.

GEO 101 INTRODUCTION TO PHYSICAL GEOLOGY (4)
Pre-Fall 2009 UMW course: GEOL 101 Introduction to Geology
Fundamental concepts of physical geology. Topics include the differentiation of the Earth, origin of the oceans and atmosphere, igneous, metamorphic, and sedimentary processes, earthquakes, plate tectonics, mountain building, surficial processes, glaciation and climate modeling, geologic time, evolution of life, and Earth history. Includes hands-on experience with rocks, minerals, fossils, and maps. $30 Course Fee. Prereq: equivalent of MATH 007 (M 095) or higher.

GEO 101 INTRODUCTION TO ENVIRONMENTAL GEOLOGY (4)
Pre-Fall 2009 UMW course: GEOL 150 Environmental Geology
This course explores the human impact on the Earth and its resources. Topics include population growth, urban development and land-use planning, environmental policy, water pollution, air pollution, acid rain, climate modeling, greenhouse warming, waste disposal, soil erosion, energy resources, geological hazards, and the environmental impact of resource extraction and use. $30 Course Fee. Prereq: equivalent of MATH 007 (M 095) or higher. (spring)
GEO 290 UNDERGRADUATE RESEARCH (V 2-8)
Pre-Fall 2009 UMW course: GEO 290 Rocks, Minerals, & Resources
This course covers the fundamentals of mineralogy followed by a thorough review of the classification and formation of igneous, metamorphic, and sedimentary rocks. Emphasis on the tectonic environments of rock and mineral formation, and on rocks and minerals as human resources. Rock and mineral identification will focus on hand-samples. $40 Course Fee. Prereq: GEO 101 (GEO 101) or GEO 150 (GEO 103), and either CHEM 101 (CHMY 121) or CHEM 131 (CHMY 141), or c/i. (spring/even-numbered years)

GEO 230 GEOLOGY OF THE AMERICAN WEST (4)
Pre-Fall 2009 UMW course: GEO 230 Geology of the American West
Geologic evolution of the west from its most ancient beginnings to modern processes that are still shaping it. The course offers opportunities to practice field and lab techniques for hand-sample identification of rocks and minerals, use maps and field observations to recognize geologic structures, and observe geomorphic processes shaping the Western landscape. Students successfully completing the course will demonstrate an integrated understanding of the topic in field activities, small group work, labs, exams, and short written and oral research presentations. Students successfully completing the course will demonstrate an integrated understanding of the topic in field activities, an annotated field photographic journal, small-group work, labs, exams, and short written and oral research presentations. Class includes several half-day field trips and one longer field trip (usually the entire second week of class) that may require a passport (depending on location). May have a service-learning component. $100 Course Fee. Prereq: GEO 101 (GEO 101) or GEO 150 (GEO 103), (fall/even-numbered years)

GEO 290 UNDERGRADUATE RESEARCH (V 2-8)
Selected topics under faculty supervision. Prereq: c/i, c/pc, and c/vc. (on demand)

GEO 292 INDEPENDENT STUDY (V 1-4)
Pre-Fall 2009 UMW course: GEO 290 Independent Study
Directed research or study on an individual basis. Prereq: c/i, c/pc, and c/vc. (on demand)

GEO 294 SEMINAR/WORKSHOP (V 1-4)
Selected topics of interest. Prereq: c/i and c/pc. (on demand)

GEO 309 SEDIMENTATION & STRATIGRAPHY (4)
Pre-Fall 2009 UMW course: GEO 432 Depositional Environments
This field-based course covers the physical and biological characteristics of modern and ancient environments of deposition. Techniques of stratigraphic and sedimentologic analysis are used to better understand the processes that control the deposition of sediments in eolian, lacustrine, fluvial, glacial, deltaic, tidal, shelf, carbonate platform, and deep ocean environments. $40 Course Fee. Prereq: GEO 226 (GEO 226). (spring/even-numbered years)

GEO 315 STRUCTURAL GEOLOGY (4)
Pre-Fall 2009 UMW course: GEO 330 Structure & Tectonics
This field-based course covers the deformation of the Earth’s crust. Topics include the mechanics of rock deformation (stress and strain), characteristics of megascopic (folds, faults), mesoscopic (foliation, lineation), and microscopic (crystal fabric) structures, and the processes of mountain building at convergent, divergent, and transform-fault plate boundaries. Field mapping techniques will be taught during afternoon and/or weekend field trips in the Dillon area. $40 Course Fee. Prereq: GEO 226 (GEO 226), or c/i. (fall/odd-numbered years)

GEO 378 SURFICIAL PROCESSES (4)
Pre-Fall 2009 UMW course: GEO 378 Surficial Processes
Field and laboratory-based study of Earth-surface processes that shape landscapes. Topics include weathering and soil formation, erosion and transport of particulate and dissolved materials, geomorphic characteristics of deposits expressed as landforms, and engineering-related physical properties of surficial deposits. Field projects may emphasize use of landforms and/or surface processes to evaluate geologic hazards, geologic resources, or other environmental problems. Field trips and field projects will require extended class hours during the second and/or third week of class and may include overnight travel. The field project usually includes a service-learning component. $40 Course Fee. Prereq: GEO 101 (GEO 101) or GEO 150 (GEO 103), and either GEO 226 (GEO 226) or BIO 214 (BIO 220) or BIO 355 (BIO 435), or c/i. (fall/odd-numbered years)

GEO 421 HYDROLOGY (4)
Pre-Fall 2009 UMW course: GEO 480 Hydrogeology
This field-based course covers the geologic aspects of water resources. Topics include the physical, chemical, and biological characteristics of surface and subsurface water, aquifer characterization, runoff processes, fluvial processes, water supply and consumption, contaminant transport, and remediation techniques. Lab included. $30 Course Fee. Prereq: GEO 101 (GEO 101) or GEO 150 (GEO 103), and MATH 131 (STAT 121), and Junior/Senior standing; or c/i. (spring/odd-numbered years)

GEO/CHMY 431 ENVIRONMENTAL CHEMISTRY (4)
Pre-Fall 2009 UMW course: CHEM/GEOL 431 Environmental Geochemistry
Students will examine and learn about the chemical and geological principles and reactions in natural systems: aquatic, marine, terrestrial, and atmospheric, and the effect and fate of contaminants in the environment. This is a field- and laboratory-oriented class, with computer analysis of data. Students successfully completing the class will demonstrate their knowledge of geochemical sampling and analysis techniques in one or more research projects. Students will evaluate their own and/or published data according to concepts studied in the class and present their research in papers and oral reports. Includes exams and teamwork. A field-based research project will require extended class hours during the second and/or third week of class. May have a service-learning component. $40 Course Fee. Prereq: GEO 101 (GEO 101) or GEO 150 (GEO 103), and CHEM 131 (CHMY 141) and CHEM 132 (CHMY 143). (spring/odd-numbered years)

GEO 490 UNDERGRADUATE RESEARCH (V 2-8)
Selected topics under faculty supervision. Prereq: c/i, c/pc, and c/vc. (on demand)

GEO 492 INDEPENDENT STUDY (V 1-4)
Pre-Fall 2009 UMW course: GEO 490 Independent Study
Directed research or study on an individual basis. Prereq: c/i, c/pc, and c/vc. (fall/spring)

GEO 494 SENIOR GEOLOGY SEMINAR (V 1-4)
Pre-Fall 2009 UMW course: GEO 409 Geology Seminar
Each seminar will provide in-depth study of a selected topic of current interest in the geosciences. Small group discussions and presentation setting. Students use published literature and other sources of information to research various aspects of the topic, write papers, and present their work to the group. Examples of possible general topics include paleoclimatology, global change, geologic hazards, stream-sediment dynamics, hydrology, geology of soils, mass extinctions, and neotectonics. May include field trips. $25 Course Fee. Prereq: Junior/Senior standing, or c/i. (spring/odd-numbered years)

GEO 498 INTERNSHIP/COOPERATIVE EDUCATION/OMNIBUS (V 1-15)
Pre-Fall 2009 UMW course: GEO 400 Coop Ed/Internship
Incorporation of an appropriate work experience into the student’s academic preparation. Prereq: Senior standing, c/i, c/pc, and c/vc. (fall/spring)

GEO 499 SENIOR PROJECT/THESIS (V 1-15)
Pre-Fall 2009 UMW course: GEO 498 Senior Project/Thesis
An individual project or thesis closely associated with the student’s academic program and career goals. Project/thesis election subject to
approval of project or thesis advisor. Prereq: Junior/Senior standing, c/i, c/pc, and c/vc. (fall/spring)

Note: New OCHE Common Course Numbering system rubrics and courses are displayed in italics throughout this Catalog.

**GEOLOGY (GEOL)**

A prerequisite for any course with a GEOL rubric is documented mathematical ability equivalent to MATH 007 Algebra/M 095 Intermediate Algebra. Ability can be demonstrated by appropriate college credit, ACT/SAT Math score, or UMW Math Placement Exam score.

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<th>Prerequisites/Notes</th>
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<td>INTRODUCTION TO GEOLOGY (4)</td>
<td>See GEO 101 Introduction to Physical Geology</td>
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<tr>
<td>GEOL 150</td>
<td>ENVIRONMENTAL GEOLOGY (4)</td>
<td>See GEO 103 Introduction to Environmental Geology</td>
</tr>
<tr>
<td>GEOL 219</td>
<td>DIRECTED STUDY (V 1-5)</td>
<td>Selected topics under faculty supervision. Prereq: c/i, c/pc, and c/vc. (on demand)</td>
</tr>
<tr>
<td>GEOL 226</td>
<td>ROCKS, MINERALS, &amp; RESOURCES (4)</td>
<td>See GEO 226 Rocks, Minerals, &amp; Resources</td>
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<tr>
<td>GEOL 230</td>
<td>GEOLOGY OF THE AMERICAN WEST (4)</td>
<td>See GEO 230 Geology of the American West</td>
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<td>GEOL 290</td>
<td>INDEPENDENT STUDY (V 1-4)</td>
<td>See GEO 292 Independent Study</td>
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<td>GEOL 330</td>
<td>STRUCTURE &amp; TECTONICS (4)</td>
<td>See GEO 315 Structural Geology</td>
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<td>GEOL 378</td>
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<td>See GEO 378 Surficial Processes</td>
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<td>GEOL 400</td>
<td>COOPERATIVE EDUCATION/INTERNSHIP (V 1-15)</td>
<td>See GEO 498 Internship/Cooperative Education/Omnibus</td>
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<td>GEOL 409</td>
<td>GEOLOGY SEMINAR (4)</td>
<td>See GEO 494 Senior Geology Seminar</td>
</tr>
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<td>GEOL 419</td>
<td>DIRECTED STUDY (V 1-5)</td>
<td>Selected topics under faculty supervision. Prereq: c/i, c/pc, and c/vc. (on demand)</td>
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<td>GEOL/CHEM 431</td>
<td>ENVIRONMENTAL GEOCHEMISTRY (4)</td>
<td>See GEO/CHMY 431 Environmental Geochemistry</td>
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<td>GEOL 432</td>
<td>DEPOSITIONAL ENVIRONMENTS (4)</td>
<td>See GEO 309 Sedimentation &amp; Stratigraphy</td>
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<td>GEOL 480</td>
<td>HYDROGEOLOGY (4)</td>
<td>See GEO 421 Hydrology</td>
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</tr>
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**HEALTH & HUMAN PERFORMANCE (HHP)**

[For OCHE equivalent courses effective Fall 2010, see appropriate rubric & course listed under individual courses]

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<tr>
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<tr>
<td>HHP 100</td>
<td>BASIC SKILLS (V 1-2)</td>
<td>Beginning, intermediate, and advanced levels of skill development. Examples of basic skill courses would include swimming, aerobic fitness, etc. May not be used or substituted for a specific course in HHP. Assessment will include methods appropriate to course outcome.</td>
</tr>
<tr>
<td>HHP 108</td>
<td>FLY FISHING &amp; FLY TYING (1)</td>
<td>This class is an introduction to the basic skills and knowledge of fly fishing and fly tying that will include tackle selection and care, casting, entomology, fish habitat, stream ethics, tactics, and strategy. Students are expected to demonstrate comprehension of the sport through exams, homework assignments, and class participation. Student participation is critical to the overall grade. Assignments will include out-of-class fly tying, habitat assessment, studying Fish &amp; Wildlife regulations, skill practice, and relevant projects. Students are encouraged to supply their own tackle, but some tackle is available for student use. $14 Course Fee. (spring)</td>
</tr>
<tr>
<td>HHP 109</td>
<td>SELF DEFENSE (1)</td>
<td>This course is an introduction to the basic concepts and practical ways in which people defend themselves in an attack situation. The primary focus will be on strategically placed kicks, hand-strikes, joint locks, and throws. Students can expect extensive hands-on experience utilizing heavy bags and physical contact with classmates. Appropriate attire for class activities is mandatory. Students will be expected to devote out-of-class time to skill practice and research-based projects. Assessment will be based on attendance, participation, and research projects. (fall)</td>
</tr>
<tr>
<td>HHP 117</td>
<td>SNOWBOARDING (1)</td>
<td>This course is an introduction to the basic skills of snowboarding. Instructional groups will be formed for beginner, intermediate, and advanced snowboarders. Students are expected to demonstrate comprehension of the sport through exams and class participation. Student participation is critical to overall grade. Equipment rental is available at Maverick Mountain. Course Fee—Varies (to cover lift ticket and lesson costs). (spring)</td>
</tr>
<tr>
<td>HHP 118</td>
<td>SKIING (1)</td>
<td>This course offers an introduction to the basic skills of downhill skiing. Instructional groups will be formed for beginner, intermediate, and advanced experience levels. Students are expected to demonstrate comprehension of the sport through exams and class participation. Student participation is critical to overall grade. Equipment rental is available at Maverick Mountain. Course Fee—Varies (to cover lift ticket and lesson costs). (spring)</td>
</tr>
<tr>
<td>HHP 126</td>
<td>RACQUET SPORTS (1)</td>
<td>Introduction to the basic skills of a variety of racquet sports including tennis, badminton, racquetball, and pickleball. Students are expected to demonstrate comprehension of each sport through exams and class participation. (spring)</td>
</tr>
</tbody>
</table>
HHP 129 INTRODUCTION TO ATHLETIC WEIGHT TRAINING (1)
Introduction to and instruction in weight training through participation in the off-season weight training program of a sport during the first year of participation in that sport at UMW. May be taken concurrently with HHP 134 Introduction to Varsity Athletics. Students are expected to demonstrate knowledge and comprehension of basic conditioning skills through the use of resistance training. Group participation. Not repeatable; maximum 1 credit. (fall/spring)

HHP 130 WEIGHT TRAINING FOR ATHLETES (1) (R)
Continued instruction in athletic weight training through participation in the off-season weight training of a sport during the second and subsequent years of participation in that sport at UMW. May be taken concurrently with HHP 135 Varsity Athletics. Students are expected to demonstrate knowledge and comprehension of basic and advanced conditioning skills through the use of resistance training. Graded on a Pass/No Pass basis. Repeatable; maximum 7 credits. (fall/spring)

HHP 131 WEIGHT TRAINING-COED (1)
Introduction to the basic weight training skills with an emphasis on developing an individualized program for each student’s needs. Students are expected to demonstrate knowledge through exams and class participation. Student participation is critical to the overall grade. This class is designed for students who are not participating in varsity athletics. (fall/spring)

HHP 134 INTRODUCTION TO VARSITY ATHLETICS (1)
Introduction to the intercollegiate athletics program during the first year of participation in that sport at UMW. May be taken concurrently with HHP 129 Introduction to Athletic Weight Training. Students are expected to demonstrate understanding and knowledge of the skills associated with participation in intercollegiate athletics. Not repeatable; maximum 1 credit. (fall/spring)

HHP 135 VARSITY ATHLETICS (1) (R)
Continued participation in the intercollegiate athletic program during a second and subsequent season of sports participation, including participation in a second sport. May be taken concurrently with HHP 130 Weight Training for Athletes. Students are expected to demonstrate a continued understanding and knowledge of the skills associated with participation in intercollegiate athletics. Graded on a Pass/No Pass basis. Repeatable; maximum 7 credits. (fall/spring)

HHP 143 FOUNDATIONS OF HEALTH & PHYSICAL EDUCATION (4)
Historical, philosophical, sociological, psychological, and scientific underpinnings of health and physical education. Emphasis on development of multidimensional perspective on design of health and physical education activities and motor skill development. Students will demonstrate an understanding of the relationships among historical, anatomical/physiological, psychological, and sociological perspectives in the field of health & physical education through a variety of hands-on and lab experiences.

HHP/ENVS 150 BASIC ROCK CLIMBING (1)
This field-based introductory course is designed for students who desire to learn the basic techniques of rock climbing. Students will learn fundamental safety techniques for climbing care and handling of the rope, basic knots, use of climbing harnesses, basic belaying techniques, communication between climbing partners, basic rappelling, and basic climbing techniques. Evaluation is based upon participation and performance. $35 Course Fee. (fall)

HHP 201 TEAM SPORT METHODS & TECHNIQUES (4)
Methods of teaching a variety of team sports, games, and lead-up activities for K-12 programming. Emphasis on development and analysis of skills, progressions, error analysis and correction, teaching techniques, methodology, and assessment. Students will demonstrate competency through class participation, peer teaching, examinations, and projects. Prereq: HHP 143. (fall)

HHP 202 INDIVIDUAL & DUAL SPORT METHODS & TECHNIQUES (4)
Methods of teaching a variety of individual and dual sports, games, and lead-up activities for K-12 programming. Emphasis on development and analysis of skills, progressions, error analysis and correction, teaching techniques, methodology, and assessment. Students will demonstrate competency through class participation, peer teaching, examinations, and projects. $50 Course Fee. Prereq: HHP 143. (spring)

HHP 205 DANCE & RHYTHM METHODS & TECHNIQUES I (1)
See DANC 285 Dance & Rhythm Methods & Techniques I

HHP 206 DANCE & RHYTHM METHODS & TECHNIQUES II (1)
See DANC 286 Dance & Rhythm Methods & Techniques II

HHP 219 DIRECTED STUDY (V 1-5)
Selected topics under faculty supervision. Prereq: c/i, c/pc, and c/cvc. (on demand)

HHP/EQST 222 ELEMENTS OF RODEO (2)
The Elements of Rodeo courses focus on National Intercollegiate Rodeo Association (NIRA) events: bareback riding, steer wrestling, saddle bronc riding, tie down roping, team roping, goat tying, breakaway roping, and barrel racing. Rules governing a selected event, techniques of competition, and responsibilities of NIRA athletes are presented. Students will apply fitness and wellness concepts, injury prevention measures, basic injury care, and winning physical and mental strategies to human and equine athletes competing in the event. (fall/spring)

HHP 231 FIRST AID & SAFETY (1)
Using the American Red Cross First Aid/CPR/AED for Schools and the Community course as a foundation, students will complete certification requirements for adult and child CPR and AED, infant CPR, and basic first aid. Students must demonstrate hands-on techniques for each skill and will also be assessed through written examinations. $15 Course Fee. (fall/spring)

HHP/HTR 240 LEISURE SERVICES (4)
This course examines the history, purpose, and function of leisure services delivered by government and private agencies. An analysis of the impact of leisure on society and the economy is addressed. (spring)

HHP 241 PERSONAL & COMMUNITY HEALTH (4)
Introduction to the fundamental health concepts and attitudes relating to concerns and needs of individuals and society. Structure, function, and dysfunction of the cardiovascular, respiratory, digestive, nervous, endocrine, immune, and integumentary systems will be covered in the context of specific topics including cancer, heart disease, infectious, chronic, and congenital diseases, consumer health, environmental health, safety, and choices relating to the use and abuse of alcohol, tobacco, and other drugs. Students are expected to demonstrate comprehension of course content through testing, individual and group assignments, presentations, and class participation. (fall/spring)

HHP 245 HUMAN SEXUALITY (4)
The study of basic aspects of human sexuality including human sexual response, development of gender roles and sexual lifestyles, reproduction and control of reproduction, AIDS and other STDs, the physiological impact of alcohol and drug education, and the legal implications of sexuality and healthy lifestyles. Upon completion of this course the student will have a basic understanding of the biological, sociological, and psychological perspectives of human sexuality. Students will be evaluated during group experiences, projects, examinations, and written assignments. (fall/spring)
HHP 290 INDEPENDENT STUDY (V 1-4)
Directed research or study on an individual basis. Prereq: c/i, c/pc, and c/vc. (fall/spring)

HHP 311 ATHLETIC TRAINING I (4)
This course offers an introduction to the field of athletic training through a combination of lecture and hands-on techniques. The historical background of athletic training, current trends, and administrative responsibilities of athletic trainers will be included in the course. Care and prevention of sports injuries including practical application of wound dressing, basic taping, bandaging, padding, and basic athletic training skills will be presented. The course includes the foundations of sport trauma, mechanism characteristics, classification, prevention, evaluation, and management of specific sports injuries. Assessment of course objectives will be conducted through exams, class assignments, and taping activities. $60$ Course Fee. (fall)

HHP 315 BIOMECHANICS (4)
An introduction to the anatomical and biomechanical aspects of human motion. Involves linear and angular kinematics and kinetics in the context of human motion, mechanics of fluids, applied anatomy, with emphasis on skeletal and muscular systems, and the analysis of selected sport activities. Students will demonstrate competency through class participation, examinations, completion of laboratory assignments, and projects. Prereq: Junior standing, or c/i. (fall)

HHP 317 EXERCISE PHYSIOLOGY (4)
An introduction to the physiological aspects of human motion. Emphasis on the physiological factors to include the metabolic, cardiovascular-respiratory, and neuro-muscular-skeletal systems that influence physical activity and exercise with reference to the acute and chronic effects of exercise and improving or maintaining physical fitness. Students will demonstrate competency through class participation, examinations, completion of laboratory assignments, and projects. Prereq: Junior standing, or c/i. (fall)

HHP 319 MOTOR LEARNING & PSYCHOLOGY (4)
A conceptual and practical introduction to the neural mechanisms and performance characteristics of human movement production and motor learning. Introduction to the relationships among psychological variables and participation and performance in sport and exercise. Students will demonstrate competence through class participation, examinations, completion of laboratory assignments, and group research project/presentation. Prereq: Junior standing, or c/i. (spring)

HHP 347 ORGANIZATION & ADMINISTRATION OF HEALTH ENHANCEMENT (4)
Organization and administration of physical education, intramurals, and health and fitness programs. Topics will include ethics, law, legal liability, budgeting, evaluating and purchasing of equipment, scheduling procedures, management and content issues, and other issues that are necessary to assure a successful program. Students will demonstrate comprehension of course content through written exams, in-class projects, special assignments, and class participation. Prereq: HHP 143, or c/i. (fall)

HHP 350 COACHING: PEDAGOGY, ADMINISTRATION, & ETHICS (4)
Scientific approach to coaching youth sport and taking theory into practice. Emphasis is on planning for and applying developmentally and instructionally appropriate instruction, leader qualities, managing the competitive environment, and maximizing the positive contributions of ethical issues of sport competition. Students will demonstrate competency through class participation, examinations, and completion of related assignments and projects. Prereq: Junior standing, or c/i. (spring/even-numbered years)

HHP 351 SECONDARY PE & HEALTH METHODS (4)
Upon completion of this course students will apply, analyze, and evaluate methods used in teaching health and physical education in grades K-12, with particular emphasis on middle and secondary levels. Skills and concepts will include teaching styles, management and content issues, technology and software materials and their application, emphasis on instructionally and developmentally appropriate methods of instruction, construction of lesson and unit plans, and appropriate methods for assessment of student progress. Prereq: HHP 241 and admission to TEP. (spring)

HHP 352 COACHING OF BASKETBALL (2)
Emphasis on the methods of teaching and coaching basketball. Offense and defense, player-coach relationships, team selections, and game situations will be areas of concentration. Students are assessed through class assignments and examinations. (spring)

HHP 353 COACHING OF TRACK & FIELD (2)
Emphasis on the methods of teaching and coaching track and field events. This course focuses on detailed instruction in the knowledge of skills for various events, coaching various styles and techniques, training and conditioning methods, conducting meets, and their applications to competitive track and field. Students are expected to demonstrate comprehension through course examinations, out-of-class assignments, and completion of a manual. (spring/even-numbered years)

HHP 354 COACHING OF BASEBALL & SOFTBALL (2)
Emphasis of the methods of teaching and coaching baseball and softball. The course focuses on detailed instruction in the knowledge of skills for various events, coaching various styles and techniques, training and conditioning methods, planning for practice sessions, and game situations. Students are expected to demonstrate comprehension through course examinations, out-of-class assignments, and completion of a manual. (spring/even-numbered years)

HHP 355 COACHING OF FOOTBALL (2)
Emphasis on the methods of teaching and coaching football. Offense and defense, player-coach relationships, team selections, planning of practice sessions, and game situations will be areas of concentration. Students are assessed through class assignments and examinations. (fall)

HHP 356 COACHING OF WRESTLING (2)
Emphasis on the methods of teaching and coaching wrestling. Offensive and defensive strategies, player-coach relationships, planning practice sessions and meets will be areas of concentration. Students are assessed through class assignments and examinations. (on demand)

HHP 358 COACHING OF VOLLEYBALL (2)
Emphasis on the methods of teaching and coaching volleyball. Offense and defense, player-coach relationships, team selections, planning practice sessions, and game situations will be areas of concentration. Students will be assessed through class assignments and examinations. (fall)

HHP 359 OFFICIATING (2)
This course will prepare students for the professional responsibilities of sports officials. Students will explore concepts in sports at each level of competition. Ethics, motivation, safe game administration, and goal setting will provide a foundation for the beginning official. Students will work to improve strategies for communication, decision-making, conflict management, and time management. Legal responsibilities of sports officials and the importance of professional associations will also be addressed. Assessment strategies will include oral presentation, written assignments, written examinations, and hands-on activities. (fall)

HHP 364 NUTRITION (4)
This course examines the interaction between nutrition, exercise, and athletic performance. Topics will include the biological, psychological,
and sociological aspects of nutrition as it relates to exercise performance. Lectures will cover current research on nutritional needs in response to exercise including fluids, energy nutrient requirements and caloric distribution, supplementation, ergogenic aids, and pre/post event recommendations. Applications will be made to various sports. Critical thinking skills will be enhanced by critiques of studies on sports nutrition-related topics and the evaluation of popular sports nutrition claims. Students will learn educational strategies for communicating with the recreational and professional athlete, coach, and athletic trainer. (spring/even-numbered years)

HHP 374 ELEMENTARY SCHOOL HEALTH & PHYSICAL EDUCATION (& PRACTICUM) (4)
Upon completion of the course, a student will understand and apply concepts of specific planning, organizing, and teaching an elementary health and physical education program. Teaching methods, organization and group process, maturational considerations, sequences in a variety of instructionally and developmentally appropriate activities, and assessment techniques will be understood, experienced, and applied. The practicum portion will take theory into practice and students will have a field experience in the public schools. Students will demonstrate competency through class participation, examinations, completion of laboratory assignments, and projects. Prereq: Admission to TEP. (fall/spring)

HHP 400 COOPERATIVE EDUCATION/INTERNSHIP (V 1-15)
A 15-week fieldwork experience with an approved sports, leisure, or recreation agency. Students will develop a learning contract in conjunction with their employer, maintain a portfolio of their work experiences, and make a final presentation of their exit interview. A minimum of 40 clock hours per credit is required. Prereq: Senior standing, c/i, c/pc, and c/vc. (fall/spring/summer)

HHP 409 SEMINAR (V 1-3)
Upon completion of the course, a student will experience selected topics in health and physical education. This course will be offered with an integrated approach incorporating concepts of the health and physical education fields as well as the relationship of concepts to other fields of study. Assessment will involve methods appropriate to the course. Prereq: c/i and c/pc. (on demand).

HHP 410 ATHLETIC TRAINING II (4)
Advanced knowledge and techniques in athletic training including injury prevention, management skills, training room procedures, therapeutic modalities, nutritional and pharmaceutical considerations, psychology of sport injuries and illnesses, protective equipment, and program organization and administration. Students are expected to demonstrate comprehension of course content through exams and classroom assignments. Lecture and discussion. Prereq: HHP 311, or c/i. (spring/odd-numbered years)

HHP 416 CONDITIONING PROGRAM DEVELOPMENT (4)
A study of the application of physiological, psychological, biomechanical, and maturational principles that guide effective fitness programming through a required field experience. Students will analyze conditioning and rehabilitation programs including program selection, prescription, and evaluation. Students will demonstrate competency through practical application while working with clients, class participation, examinations, portfolios, and completion of assignments and projects. Prereq: HHP 311, or c/i. (spring/even-numbered years)

HHP 419 DIRECTED STUDY (V 1-5)
Selected topics relevant to health and/or physical education. This course is under faculty supervision. Assessment will involve methods appropriate to the outcomes. Prereq: c/i, c/pc, and c/vc. (on demand)

HHP 454 ADAPTED PHYSICAL EDUCATION & RECREATION (4)
Study of conditions that require physical education programs to be adapted to individuals with special needs. Principles and practices in the application of exercise and physical activity for persons with specific disabling conditions. Prereq: Admission to TEP. (fall)

HHP 479 SPORTS MEDICINE INTERNSHIP (V 1-6)
The Sports Medicine Internship incorporates an appropriate work experience into the student’s academic preparation. Students are provided with opportunities for hands-on experiences in the field of sports medicine through observation and participation in the profession of Athletic Training. Prereq: Junior/Senior standing, consent of advisor, and c/i. (fall/spring)

HHP 490 INDEPENDENT STUDY (V 1-4)
Directed research or study on relevant health and/or physical education topics. Prereq: c/i, c/pc, and c/vc. (fall/spring)

HHP 497 COACHING INTERNSHIP (V 1-4)
An approved off-campus practical experience in coaching through assisting with coaching duties under the direction of a supervising coach. The student is expected to demonstrate knowledge, understanding, and comprehension of coaching by completing a field manual. The supervising coach will submit an evaluation of the student’s performance. Prereq: HHP 311, corresponding coaching techniques class, and c/i. (fall/spring)

HHP 498 SENIOR PROJECT/THESIS (V 1-15)
An individual project or thesis closely associated with the student’s academic program and career goals. Student works with one selected faculty member. Prereq: Senior standing, c/i, c/pc, and c/vc. (fall/spring)

Note: New OCHE Common Course Numbering system rubrics and courses are displayed in italics throughout this Catalog.

HISTORY (HIST)
[For OCHE equivalent courses effective Fall 2009, see appropriate rubric & course listed under individual courses]

HIST 101 EUROPEAN CIVILIZATION I (4) (CD)
See HISTR 101 Western Civilization I

HIST 102 EUROPEAN CIVILIZATION II (4) (CD)
See HISTR 102 Western Civilization II

HIST 111 AMERICAN HISTORY TO THE CIVIL WAR (4) (CD)
See HSTA 101 American History I

HIST 112 AMERICAN HISTORY SINCE RECONSTRUCTION (4) (CD)
See HSTA 102 American History II

HIST 219 DIRECTED STUDY (V 1-4)
Selected topics under faculty supervision, with emphasis on experiential learning. Prereq: c/i, c/pc, and c/vc. (on demand)

HIST 220 INTRODUCTION TO RESEARCH METHODS (4)
See ISSS 220 Introduction to Research Methods

HIST/ANTH/POLS/SOC 221 QUANTITATIVE METHODS FOR SOCIAL SCIENCE (4)
See ISSS 221 Quantitative Research Methods for Social Science
HIST/ANTH/POLS/PSY/SOC 222 QUALITATIVE METHODS FOR SOCIAL SCIENCE (4)
See ISSS 222 Qualitative Research Methods for Social Science

HIST 225 AFRICA & THE MIDDLE EAST (4) (CD)
See HSTR 260 Africa & the Middle East

HIST 240 HISTORY OF THE FAR EAST (4) (CD)
See HSTR 255 History of the Far East

HIST 263 UNITED STATES SINCE 1945 (4) (CD)
See HSTA 215 Post-World War II America

HIST 274 WORLD HISTORY (4) (CD)
See HSTR 274 World History

HIST 290 INDEPENDENT STUDY (V 1-4)
See HSTA or HSTR 292 Independent Study

HIST 320 HISTORY OF CENTRAL EUROPE I (4)
See HSTR 310 History of Central Europe I

HIST 321 HISTORY OF CENTRAL EUROPE II (4)
See HSTR 311 History of Central Europe II

HIST 325 HISTORY OF THE MASS MEDIA (4)
See HSTA 331 History of the Mass Media

HIST 360 COLD WAR EUROPE (4)
See HSTR 360 Cold War Europe

HIST 362 AFRICAN-AMERICAN HISTORY (4)
See HSTA 341 African-American History

HIST 370 WOMEN'S HISTORY (4)
See HSTA 366 Women's History

HIST 371 MONTANA & THE AMERICAN WEST (4)
See HSTA 355 Montana & the American West

HIST 380 MODERN EUROPE (4)
See HSTR 326 Contemporary Europe

HIST 400 COOPERATIVE EDUCATION/INTERNSHIP (V 1-15)
See HSTA or HSTR 498 Internship/Cooperative Education/Omnibus

HIST 409 SEMINAR (4)
See HSTA 494 or HSTR 494 Seminar/Workshop

HIST 419 DIRECTED STUDY (V 1-4)
Selected topics under faculty supervision, with emphasis on experiential learning. Prereq: c/i, c/pc, and c/vc. (on demand)

HIST 452 EUROPEAN INTELLECTUAL HISTORY (4)
See HSTR 423 European Intellectual History

HIST 456 UNITED STATES CULTURAL HISTORY (4)
See HSTA 412 American Thought & Culture

HIST 490 INDEPENDENT STUDY (V 1-4)
See HSTA or HSTR 492 Independent Study

HIST 498 SENIOR PROJECT/THESIS (V 1-15)
See HSTA or HSTR 499 Senior Project/Thesis

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HISTORY-AMERICAN (HSTA)
[New OCHE rubric effective Fall 2009]

HSTA 101 AMERICAN HISTORY I (4) (CD)
Pre-Fall 2009 UMW course: HIST 111 American History to the Civil War
A survey of the important events and key issues shaping the development of the United States from the colonial period through the Civil War. Includes a comparison of the unique characteristics of early U.S. society in relation to Native American and European counterparts. Student understanding will be evaluated on the basis of performance on examinations, and written assignments based on critical readings of assigned texts. Lecture with some group discussion. (fall/spring)

HSTA 102 AMERICAN HISTORY II (4) (CD)
Pre-Fall 2009 UMW course: HIST 112 American History Since Reconstruction
A survey of the important events and key issues involved in the emergence of the United States as a world power after the Civil War, and how that power has been exercised through the present day. Includes attention to the assimilation of foreign-born immigrants, the roots of Civil Rights activism with respect to African-Americans, and efforts to deal with the “Indian problem.” Student understanding will be evaluated on the basis of performance on examinations, and written assignments based on critical readings of assigned texts. Lecture with some group discussion. (fall/spring)

HSTA 215 POST-WORLD WAR II AMERICA (4) (CD)
Pre-Fall 2009 UMW course: HIST 263 United States Since 1945
An in-depth examination of the important events that have shaped American society since the end of World War II, with particular emphasis on the Cold War, Civil Rights including identity movements associated with African-Americans, Native Americans, and women, liberalism vs. conservatism, and U.S. responsibilities as a world power. Students will be expected to engage in class discussions and prepare written assignments based on core readings and library research. Lecture and discussion. (Block 3 fall/even-numbered years)

HSTA 290 UNDERGRADUATE RESEARCH (V 2-8)
Selected topics under faculty supervision. Prereq: c/i, c/pc, and c/vc. (on demand)

HSTA 292 INDEPENDENT STUDY (V 1-4)
Pre-Fall 2009 UMW course: HIST 290 Independent Study
Directed research or study on an individual basis. Prereq: c/i, c/pc, and c/vc. (on demand)

HSTA 294 SEMINAR/WORKSHOP (V 1-4)
Selected topics of interest. Prereq: c/i. (on demand)

HSTA 331 HISTORY OF THE MASS MEDIA (4)
Pre-Fall 2009 UMW course: HIST 325 History of the Mass Media
A critical examination of the social role played by newspapers, magazines, books, movies, radio, and television in the United States from the Revolution until the present. Students will show understanding of the material through class discussion and written assignments based on library research. Lecture and discussion. Prereq: HIST 111 (HSTA 101) or HIST 112 (HSTA 102), and either ANTH/HIST/POLS/PSY/SOC 220, or ANTH/HIST/POLS/PSY/SOC 221, or ANTH/HIST/POLS/PSY/SOC 222, or ISSS 222; or c/i. (on demand)
HSTA 341 AFRICAN-AMERICAN HISTORY (4)
Pre-Fall 2009 UMW course: HIST 362 African-American History
An examination of African-American experiences in the United States, from slavery through emancipation and the civil rights movement, to contemporary debates on race and equality. Students will be evaluated on class participation and several written assignments based on critical readings of assigned texts. Lecture and discussion. Prereq: ANTH/HIST/POLS/PSY/SOC 220, or ANTH/HIST/POLS/PSY/SOC 221, or ANTH/HIST/POLS/PSY/SOC 222, or c/i. (Block 1 fall/even-numbered years)

HSTA 355 MONTANA & THE AMERICAN WEST (4)
Pre-Fall 2009 UMW course: HIST 371 Montana & the American West
An examination of the development of America’s western territories, with special emphasis on Montana history, Native American cultures, and the background of contemporary issues relating to the lands west of the Mississippi River. Students will engage in class discussion and prepare written assignments based on core readings and library research. Lecture and discussion. $15 Course Fee. Prereq: ANTH/HIST/POLS/PSY/SOC 220, or ANTH/HIST/POLS/PSY/SOC 221, or ANTH/HIST/POLS/PSY/SOC 222, or c/i. (Block 2 fall/odd-numbered years)

HSTA 386 WOMEN’S HISTORY (4)
Pre-Fall 2009 UMW course: HIST 370 Women’s History
An examination of the roles played by women in shaping significant historical events, issues, and movements. The course will engage political, cultural, social, and economic aspects of those roles and examine how each either conforms to or challenges traditional views of women. Primary emphasis will be on American women post-1700, but with some comparative attention to women in European and non-Western societies. Students will be expected to participate in class discussions and prepare written assignments based on core readings and library research. Lecture, discussion, and group projects. Prereq: HIST 111 (HSTA 101) or HIST 112 (HSTA 102), and either ANTH/HIST/POLS/PSY/SOC 220, or ANTH/HIST/POLS/PSY/SOC 221, or ANTH/HIST/POLS/PSY/SOC 222, or c/i. (Block 8 spring/odd-numbered years)

HSTA 412 AMERICAN THOUGHT & CULTURE (4)
Pre-Fall 2009 UMW course: HIST 456 US Cultural History
An historical investigation of the roles played by art, literature, religion, and philosophy in shaping ideas about American society and identity from the Puritans to Elvis Presley and beyond. Students will participate in class discussions and prepare a research project based on original library and/or archival research. Seminar. Prereq: HIST 111 (HSTA 101) or HIST 112 (HSTA 102), and either ANTH/HIST/POLS/PSY/SOC 220, or ANTH/HIST/POLS/PSY/SOC 221, or ANTH/HIST/POLS/PSY/SOC 222, or ISSS 222; or c/i. (Block 4 fall/odd-numbered years)

HSTA 490 UNDERGRADUATE RESEARCH (V 2-8)
Selected topics under faculty supervision. Prereq: c/i, c/pc, and c/vc. (on demand)

HSTA 492 INDEPENDENT STUDY (V 1-4)
Pre-Fall 2009 UMW course: HIST 490 Independent Study
Directed research or study on an individual basis, with emphasis on experiential learning. Topic and terms of evaluation to be determined by agreement between student and instructor, but likely to include a written research project and creation of a topical bibliography. Prereq: ANTH/HIST/POLS/PSY/SOC 220, or ANTH/HIST/POLS/PSY/SOC 221, or ANTH/HIST/POLS/PSY/SOC 222, or ISSS 222; and c/i, c/pc, and c/vc. (on demand)

HSTA 494 SEMINAR/WORKSHOP (V 1-4)
Pre-Fall 2009 UMW course: HIST 409 Seminar
Selected topics of interest. Prereq: Junior standing and c/i. (Block 5 spring/even-numbered years)

HSTA 498 INTERNSHIP/COORDERATIVE EDUCATION/OMNIBUS (V 1-15)
Pre-Fall 2009 UMW course: HIST 400 Coop Ed/Internship
This option is intended to provide students with an opportunity to incorporate an appropriate extended field experience into their academic program. Field placement options to include all facets of the historical professions. Prereq: Senior standing, and either ANTH/HIST/POLS/PSY/SOC 220, or ANTH/HIST/POLS/PSY/SOC 221, or ANTH/HIST/POLS/PSY/SOC 222, or ISSS 222; and c/i, c/pc, and c/vc. (on demand)

HSTA 499 SENIOR PROJECT/THESIS (V 1-15)
Pre-Fall 2009 UMW course: HIST 498 Senior Project/Thesis
This course is intended as a culminating experience for the social science degree. Working with a faculty advisor, the student will generate a product that demonstrates a competent, independent application of basic historical research skills. Prereq: ANTH/HIST/POLS/PSY/SOC 220, or ANTH/HIST/POLS/PSY/SOC 221, or ANTH/HIST/POLS/PSY/SOC 222, or ISSS 222; and c/i, c/pc, and c/vc. (on demand)

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HISTORY - WORLD (HSTR)
[New OCHE rubric effective Fall 2009]

HSTR 101 WESTERN CIVILIZATION I (4) (CD)
Pre-Fall 2009 UMW course: HIST 101 European Civilization I
A comprehensive introductory history of European civilization from classical antiquity to 1715. Students will be assessed on their ability to write short critical papers, on exams, and on classroom participation that demonstrate critical thinking and an ability to communicate in a scholarly manner. (fall/spring)

HSTR 102 WESTERN CIVILIZATION II (4) (CD)
Pre-Fall 2009 UMW course: HIST 102 European Civilization II
A comprehensive introductory history of European civilization from 1715 to the present. Students will be assessed on their ability to write short critical papers, on exams, and on classroom participation that demonstrate critical thinking and an ability to communicate in a scholarly manner. (fall/spring)

HSTR 255 HISTORY OF THE FAR EAST (4) (CD)
Pre-Fall 2009 UMW course: HIST 240 History of the Far East
A survey that comprehensively studies the history of East Asia and India. First, students will briefly overview the early histories of Japan, China, the Far East, and India in order to better understand the region’s dynamic change since the 1800s. The course primarily investigates the impact that East Asian history has had on the West after the 1800s. Students will be evaluated on class participation, examinations, and several written assignments based on critical core readings. Lecture and discussion. (Block 7 spring/even-numbered years)

HSTR 260 AFRICA & THE MIDDLE EAST (4) (CD)
Pre-Fall 2009 UMW course: HIST 225 Africa & the Middle East
A survey of the key historical developments that have shaped the cultures, societies, and institutions of Africa and the Middle East. Includes an examination of how the people of these two regions have interacted, and their influence on other parts of the world. Students will be expected to participate in class discussions and complete writing and research
assignments based on core readings. Lecture, discussion, and group projects. (Block 5 spring/odd-numbered years)

**HSTR 274 WORLD HISTORY (4) (CD)**

Pre-Fall 2009 UMW course: HIST 274 World History

This class examines the history of the world. Obviously, it is impossible to outline the history of the world in a block, nevertheless we will concentrate on the history of the Middle East and Africa. Hence, we will ask and answer specific questions of numerous regional histories that hopefully will give us tools that will allow us to study any aspect of human history on our own yet at the same time expose students to the cultural diversity that exists on the globe. The expected outcome for students at the conclusion of this class will be: 1) the ability to answer questions such as how historians have interpreted the past, and how they investigated “alien” civilizations; 2) the ability to know how and why civilizations developed and changed over time; 3) the ability to know how civilizations interact; and 4) the ability to understand, appreciate, and communicate historical dynamics that students have gleaned from independent exploration and research. Students will be assessed on their ability to write short critical papers, answer essay questions that demonstrate analytical thinking, and on an ability to communicate in a scholarly manner. (Block 7 spring)

**HSTR 290 UNDERGRADUATE RESEARCH (V 2-8)**

Selected topics under faculty supervision. Prereq: c/i, c/pc, and c/vc. (on demand)

**HSTR 292 INDEPENDENT STUDY (V 1-4)**

Pre-Fall 2009 UMW course: HIST 290 Independent Study

Directed research or study on an individual basis. Prereq: c/i, c/pc, and c/vc. (on demand)

**HSTR 294 SEMINAR/WORKSHOP (V 1-4)**

Selected topics of interest. Prereq: c/i. (on demand)

**HSTR 310 HISTORY OF CENTRAL EUROPE I (4)**

Pre-Fall 2009 UMW course: HIST 310 History of Central Europe I

This class examines the history of Central Europe from the end of the Napoleonic Wars to Adolf Hitler’s seizure of power in 1933. Special emphasis will be afforded to social/cultural history. Such an approach best allows students to understand how the rise of the middle class, industrialization, the beginnings of democracy, and modernism impacted society politically, economically, and as a whole. From all of Central Europe’s nation-states, this course will closely explore the history of the German people and state during this time. Trying to understand why and how Fascism/Nazism was attractive to Germans and others in Central Europe will be critical. Students will show understanding of the material through class discussion, group projects, written assignments based on core critical readings and library research, and examinations. Lecture, discussion, and group projects-research. Prereq: ANTH/HIST/POLS/PSY/SOC 220, or ANTH/HIST/POLS/PSY/SOC 221, or ANTH/HIST/POLS/PSY/SOC 222, or ISS 222; c/vc. (Block 5 fall/odd-numbered years)

**HSTR 311 HISTORY OF CENTRAL EUROPE II (4)**

Pre-Fall 2009 UMW course: HIST 311 History of Central Europe II

The course will pick up where HIST 320 left off. Nazi Germany dominated Central Europe after 1933, and its subsequent defeat gave birth to historical dynamics that still dominate Central Europe. Thus, this class will focus on the history of Germany from 1933 until the present. The course examines Nazi strategies at establishing a totalitarian regime, the fascist world-view, World War II, resistance to the Nazis, and the Holocaust. Post-war Central Europe will also be examined through the lens of Germany, a state that today plays a central role in the European Union. Students will show understanding of the material through class discussion, group projects, written assignments based on critical core readings and library research, and examinations. Lecture, discussion, and group projects-research. Prereq: ANTH/HIST/POLS/PSY/SOC 220, or ANTH/HIST/POLS/PSY/SOC 221, or ANTH/HIST/POLS/PSY/SOC 222, or ISS 222; c/vc. (on demand)

**HSTR 326 CONTEMPORARY EUROPE (4)**

Pre-Fall 2009 UMW course: HIST 326 Modern Europe

This class examines the political, social, and cultural history of 20th century Europe including the rise of nationalism, World Wars I and II, fascism, Marxism, the rise and fall of the Soviet Empire, the European Union, and life in Europe. The central theme of the course will be: “As Americans, what can the European experience teach us?” Students will show understanding of the material through class discussion, group projects, written assignments based on critical core readings and library research, and examinations. Lecture, discussion, and group projects-research. Prereq: ANTH/HIST/POLS/PSY/SOC 220, or ANTH/HIST/POLS/PSY/SOC 221, or ANTH/HIST/POLS/PSY/SOC 222, or ISS 222; c/vc. (Block 6 spring/odd-numbered years)

**HSTR 360 COLD WAR EUROPE (4)**

Pre-Fall 2009 UMW course: HIST 360 Cold War Europe

An intense investigation of Eastern Europe from the 19th century to the present. Particular emphasis will be placed on eastern Europe immediately after the conclusion of World War II when Stalinist regimes were put in power in Poland, Czechoslovakia, Hungary, and East Germany. This class will explore Eastern Europe by studying its social/cultural history. Such an approach best allows students to understand how societies reacted to the imposition of Stalinism, how they resisted it, and how they eventually overthrew Soviet domination in the revolutions of 1989. Students will show understanding of the material through class discussion, group projects, written assignments based on critical core readings and library research, and examinations. Lecture, discussion, and group projects-research. Prereq: ANTH/HIST/POLS/PSY/SOC 220, or ANTH/HIST/POLS/PSY/SOC 221, or ANTH/HIST/POLS/PSY/SOC 222, or ISS 222; c/vc. (Block 2 fall/odd-numbered years)

**HSTR 423 EUROPEAN INTELLECTUAL HISTORY (4)**

Pre-Fall 2009 UMW course: HIST 423 European Intellectual History

An in-depth analysis of 19th and 20th century European Intellectual history. Students do primary readings of Max Weber, Karl Marx, Friedrich Nietzsche, Theodor Adorno, Louis Althusser, Roland Barthes, Jacques Derrida, Michel Foucault, Juergen Habermas, Martin Heidegger, Max Horkheimer, Georg Lukacs, Jean-Paul Sartre, Claude Levi-Strauss, and Hayden White. Critical discussions will center on the Enlightenment, Postivism, Marxism, and Post-modernism. This class is conducted in a seminar format. Students will demonstrate understanding via the course’s heavy emphasis on reading, analysis, discussion, and writing (based upon library and archival research). Prereq: POLS 250 (PSCI 250), and either ANTH/HIST/POLS/PSY/SOC 220, or ANTH/HIST/POLS/PSY/SOC 221, or ANTH/HIST/POLS/PSY/SOC 222, or ISS 222; c/vc. (Block 4 fall/odd-numbered years)

**HSTR 490 UNDERGRADUATE RESEARCH (V 2-8)**

Selected topics under faculty supervision. Prereq: c/i, c/pc, and c/vc. (on demand)

**HSTR 492 INDEPENDENT STUDY (V 1-4)**

Pre-Fall UMW course: HIST 490 Independent Study

Directed research or study on an individual basis, with emphasis on experiential learning. Topic and terms of evaluation to be determined by agreement between student and instructor, but likely to include a written research project and creation of a topical bibliography. Prereq: ANTH/HIST/POLS/PSY/SOC 220, or ANTH/HIST/POLS/PSY/SOC 221, or ANTH/HIST/POLS/PSY/SOC 222, or ISS 222; c/vc. (Block 2 fall/odd-numbered years)

**HSTR 494 SEMINAR/WORKSHOP (V 1-4)**

Pre-Fall 2009 UMW course: HIST 494 Independent Study

Directed research or study on an individual basis, with emphasis on experiential learning. Topic and terms of evaluation to be determined by agreement between student and instructor, but likely to include a written research project and creation of a topical bibliography. Prereq: ANTH/HIST/POLS/PSY/SOC 220, or ANTH/HIST/POLS/PSY/SOC 221, or ANTH/HIST/POLS/PSY/SOC 222, or ISS 222; c/vc. (Block 2 fall/odd-numbered years)

**HSTR 498 INTERNSHIP/COOPERATIVE EDUCATION/OMNIBUS (V 1-15)**

Pre-Fall 2009 UMW course: HIST 498 Internship

This option is intended to provide students with an opportunity to incorporate an appropriate extended field experience into their academic program.
Honors Seminars may substitute for required courses for a degree or General Education. These substitutions are detailed in the seminar proposals. For precise information, see instructors of the seminars. Students must apply and be accepted to the Honors Program in order to enroll in Honors Seminars (see page 17).

### HON 202 SOPHOMORE HONORS SEMINAR (4)
Title, content, and sequence vary. Class will include significant components associated with experiential education.

### HON 201 SOPHOMORE HONORS SEMINAR (4)
Title, content, and sequence vary. Class will include significant components associated with experiential education.

### HON 102 FRESHMAN HONORS SEMINAR (4)
Title, content, and sequence vary. Class will include significant components associated with experiential education.

### HON 101 FRESHMAN HONORS SEMINAR (4)
Title, content, and sequence vary. Class will include significant components associated with experiential education.

### HON 402 SENIOR HONORS SEMINAR (4)
Title, content, and sequence vary. Class will include significant components associated with experiential education.

### HON 401 SENIOR HONORS SEMINAR (4)
Title, content, and sequence vary. Class will include significant components associated with experiential education.

### HON 302 JUNIOR HONORS SEMINAR (4)
Title, content, and sequence vary. Class will include significant components associated with experiential education.

### HON 301 JUNIOR HONORS SEMINAR (4)
Title, content, and sequence vary. Class will include significant components associated with experiential education.

### HON 200 INTERNSHIP (V 1-8)
A laboratory field experience providing a practical application of acquired knowledge and theory in a professional setting. Students serve under the guidance of professional personnel with the support of a university faculty supervisor. Students will complete a series of written periodic reports and a portfolio in the form of a final comprehensive report on their experience. $10/Credit Course Fee. Prereq: Sophomore standing and c/i.

### HTR 200 INTERNSHIP (V 1-8)
A laboratory field experience providing a practical application of acquired knowledge and theory in a professional setting. Students serve under the guidance of professional personnel with the support of a university faculty supervisor. Students will complete a series of written periodic reports and a portfolio in the form of a final comprehensive report on their experience. $10/Credit Course Fee. Prereq: Sophomore standing and c/i.

### HTR 299 SENIOR PROJECT/THESIS (V 1-15)
Pre-Fall 2009 UMW course
HIST 498 Senior Project/Thesis
This course is intended as a culminating experience for the social science degree. Working with a faculty advisor, the student will generate a product that demonstrates a competent, independent application of basic historical research skills. Prereq: ANTH/HIST/POLS/PSY/SOC 220, or ANTH/HIST/POLS/PSY/SOC 221, or ANTH/HIST/POLS/PSY/SOC 222, or ISSS 222; and c/i, c/pc, and c/vc. (on demand)

### HTR/HHP 240 LEISURE SERVICES (4)
This course examines the history, purpose, and function of leisure services delivered by government and private agencies. An analysis of the impact of leisure on society and the economy are addressed. (spring)

### HTR 101 INTRODUCTION TO HOSPITALITY (3)
A basic introduction to the lodging and food service industry including historical background, overview of various operations, and future trends. (spring)

### HTR 201 SOPHOMORE HONORS SEMINAR (4)
Title, content, and sequence vary. Class will include significant components associated with experiential education.

### HTR 200 INTERNSHIP (V 1-8)
A laboratory field experience providing a practical application of acquired knowledge and theory in a professional setting. Students serve under the guidance of professional personnel with the support of a university faculty supervisor. Students will complete a series of written periodic reports and a portfolio in the form of a final comprehensive report on their experience. $10/Credit Course Fee. Prereq: Sophomore standing and c/i.

### HTR 290 INDEPENDENT STUDY (V 1-4)
Directed research or study on an individual basis. Prereq: c/i, c/pc, and c/vc. (fall/spring)

### HTR 322 GROUP TRAVEL (3)
The course will cover the major tourist attractions and destinations in the world with particular emphasis on Anglo-America. Destinations and attractions will be studied in light of the influence of various geographic features such as landform, climate, transportation, etc. (fall)

### HTR 321 DESTINATION GEOGRAPHY (4)
The course will cover the major tourist attractions and destinations in the world with particular emphasis on Anglo-America. Destinations and attractions will be studied in light of the influence of various geographic features such as landform, climate, transportation, etc. (fall)

### HTR 355 MEETING PLANNING (3)
Comprehensive study of conventions, trade shows, and other formal gatherings from the perspectives of both the planner and the facility manager. This course will include site and facility selection, program development, program implementation, and program assessment. Students may be required to spend time at off-campus facilities. $25 Course Fee. Prereq: Sophomore standing and c/i.

Note: New OCHE Common Course Numbering system rubrics and courses are displayed in italics throughout this Catalog.
HTR 400 COOPERATIVE EDUCATION/INTERNSHIP (V 1-15)
A laboratory field experience providing a practical application of acquired knowledge and theory in a professional setting. Students serve under the guidance of professional personnel with the support of a university faculty advisor. Students will complete a series of written periodic reports, a portfolio in the form of a final comprehensive report on their experience, and a final oral presentation of their internship to the department faculty as part of their exit interview. $10/Credit Course Fee. Prereq: Senior standing, c/i, c/pc, and c/vc. (fall/spring/summer)

HTR 419 DIRECTED STUDY (V 1-5)
Selected topics under faculty supervision. Prereq: c/i, c/pc, and c/vc. (on demand)

Note: New OCHE Common Course Numbering system rubrics and courses are displayed in italics throughout this Catalog.

INTERDISCIPLINARY STUDIES-SOCIAL SCIENCE (ISSS) [New OCHE rubric effective Fall 2009]

ISSS 121 AMERICAN NATIONAL & STATE GOVERNMENT (4) (CD)
Pre-Fall 2009 UMW course: POLS 121 American National & State Government
A survey of basic institutions of government in the United States, the powers they exercise, and the practical and philosophical influences that contributed to their development. This course also examines the relationships between federal, state, and tribal sovereignty, and the differences and similarities between how these three levels of government operate and are structured. Issues such as the differential effects of and access to power experienced by various cultural groups within the United States will be explored. Students will demonstrate understanding of course content through in- and out-of-class writing assignments. Lecture and group discussion. $15 Course Fee. (fall)

ISSS 201 THE WORLD ECONOMY (4)
Pre-Fall 2009 UMW course: ECON/GEOG/POLS 201 The World Economy
An introduction to the development, structures, and processes of the world economy in the modern age. Analyses of the various attempts during this period to explain, understand, justify, and critique this world economy. Location analyses of economic activity and patterns of development. Emphasis placed on the interrelationships of resources, types of economic organization, environmental impact, and social justice. (fall)

ISSS 202 POLITICAL GEOGRAPHY OF THE ROCKY MOUNTAIN WEST (4) (CD)
This course provides an introduction to the regional geography of both American and Canadian sections of the Rocky Mountain West, including the study of environmental, political, linguistic, economic, social diversity—with special emphasis on the native peoples of the region—and spatial relationships. The course will investigate the nature of individual dignity, popular sovereignty, political power, and political authority through the analysis of regional political issues. Comparison will be made between American and Canadian democracy as forms of government based on federalism, separation of powers, checks and balances, civil rights and liberties, elected representation, and popular participation. Students will be evaluated on the basis of written/visual work and class participation. (spring)

ISSS 213 INTRODUCTION TO GLOBAL POLITICS (4)
A survey of the major institutions, issues, and political processes of the contemporary global system. Students will be introduced to the major theories that inform international political decision-making and policy development, and will use these theories to evaluate the substantive issues of world politics—including international conflict, genocide, global trade and capital flows, human rights, environmental decline, and population health. Evaluation is based on individual writing assignments, class participation, and group and individual presentations deriving from class activities. $15 Course Fee. (spring)

ISSS 220 INTRODUCTION TO RESEARCH METHODS (4)
Pre-Fall 2009 UMW course: ANTH/HIST/POLS/SOC 220
Introduction to Research Methods
A survey of quantitative methods and tools used by various disciplines across the social and behavioral sciences and the humanities to investigate individuals, cultures, and societies. Students are expected to demonstrate understanding and comprehension of course content through course examinations, out-of-class writing assignments, and the critical application of course content to a student-selected problem. Lecture, small group discussions, and problem-solving. Prereq: Completion of General Education Behavioral & Social Sciences requirements and MATH 131 (STAT 121), or c/i. (on demand)

ISSS 221 QUANTITATIVE RESEARCH METHODS FOR SOCIAL SCIENCE (4)
Pre-Fall 2009 UMW course: ANTH/HIST/POLS/SOC 221
Quantitative Methods for Social Science
This course introduces students to the basic quantitative research methods used in the Social Sciences and History. The emphasis in this course is not on the mathematics underlying quantitative design and statistics, but on understanding and using quantitative methods for research and for reasoning, thinking, and problem-solving. Areas to be covered include the relationship between theory and research methods, design, sampling, measurement, data collection, analysis, and reporting. Evaluation is based on writing assignments and class participation, as well as individual and group projects. Prereq: Completion of General Education Behavioral & Social Sciences requirements. (on demand)

ISSS 222 QUALITATIVE RESEARCH METHODS FOR SOCIAL SCIENCE (4)
Pre-Fall 2009 UMW course: ANTH/HIST/POLS/PSY/SOC 222
Qualitative Methods for Social Science
This course introduces students to the qualitative research methods and tools used by social and behavioral sciences to investigate individual, cultural, and social behavior. Emphasis in this course is on understanding how to select and design appropriate qualitative studies, with special attention given to research ethics—particularly when working with human subjects. Methodologies emphasized include single and comparative case studies, naturalistic observation, surveys, and discourse analysis. Evaluation is based on writing assignments and class participation, as well as individual and group projects. Prereq: Completion of General Education Behavioral & Social Sciences requirements. (Block 5 spring)

ISSS 290 UNDERGRADUATE RESEARCH (V 2-8)
Selected topics under faculty supervision. Prereq: c/i, c/pc, and c/vc. (on demand)
ISSS 292 INDEPENDENT STUDY (V 1-4)
Directed research or study, with emphasis on experiential learning. Prereq: c/i, c/p/c, and c/v/c. (on demand)

ISSS 294 SEMINAR/WORKSHOP (V 1-4)
Selected topics of interest with emphasis on experiential learning in democratic values and engagement with global society. Evaluation is based on writing assignments and class participation. Prereq: c/i. (on demand)

ISSS 305 SOCIAL & ANTHROPOLOGICAL THEORY (4)
Pre-Fall 2009 UMW course: SOC 305 Social Theory
This course will introduce students to both the classic and current sociological theories. Particular emphasis will be placed on sociological theory development from the Enlightenment to the present. In addition, students will closely examine the relationship between historical settings and social issues. Critical to course success will be an understanding of the importance of these theories to the development of sociology as a discipline. Students will demonstrate the ability to critically analyze course content through written critiques, independent investigations, and directed examinations. Prereq: SOC 115 (SOCI 101), and either ANTH/HIST/POLS/PSY/SOC 220, or ANTH/HIST/POLS/PSY/SOC 221, or ANTH/HIST/POLS/PSY/SOC 222, or ISSS 222; or c/i. (on demand)

ISSS 315 POLITICAL ANTHROPOLOGY & SOCIOLOGY (4)
Pre-Fall 2009 UMW course: ANTH/SOC 315 Political Sociology
This course will attempt to answer three questions: (1) what is the source of political ideas and political behavior; (2) which groups control the state institutions and which groups have the most influence on state policies; and (3) what role the state plays in society. The state has a central role in stabilizing society and which groups benefit most from this role will be a topic of investigation. Students will also look at political life and culture of all social classes. Students will demonstrate an understanding of course content through written critiques, independent investigations, and directed examinations. Lecture and small group discussions; extensive reading assignments. Prereq: SOC 115 (SOCI 101), and either ANTH/HIST/POLS/PSY/SOC 220, or ANTH/HIST/POLS/PSY/SOC 221, or ANTH/HIST/POLS/PSY/SOC 222, or ISSS 222; or c/i. (Block 4 fall/odd-numbered years)

ISSS 321 COMPARATIVE POLITICS (4)
Pre-Fall 2009 UMW course: POLS 321 Comparative Politics
This course provides an in-depth examination of the comparative study of politics across both time and space. Emphasis will be placed on the analysis of differing forms of government, processes of regime change, and the variety of political activity. Students will be evaluated based on class participation and written assignments requiring some individual research. Seminar. Prereq: ANTH/HIST/POLS/PSY/SOC 220, or ANTH/HIST/POLS/PSY/SOC 221, or ANTH/HIST/POLS/PSY/SOC 222, or ISSS 222; or c/i. (Block 3 fall/even-numbered years)

ISSS 341 POLITICAL ECONOMY (4)
Pre-Fall 2009 UMW course: POLS 341 Political Economy
An introduction to classical, modern, and contemporary theories of political economy and the economic and political programs that were developed as a result of and in response to such theories. These principles will be used to promote understanding of how economic and political considerations constrain and influence one another. Students will be evaluated based on class participation and written assignments requiring some individual research. Seminar. $15 Course Fee. Prereq: ECON/GEOG/POLS 201 (ISSS 201), and either ANTH/HIST/POLS/PSY/SOC 220, or ANTH/HIST/POLS/PSY/SOC 221, or ANTH/HIST/POLS/PSY/SOC 222, or ISSS 222; or c/i. (Block 1 fall/odd-numbered years)

ISSS 425 MONTANA INDIAN SOVEREIGNTY (4)
Pre-Fall 2009 UMW course: SOC 425 Montana Indian Sovereignty
This course covers the struggle of Montana Indians to preserve their cultures in the face of the Dominant Culture's attempt to acculturate and eliminate indigenous Montana cultures. Issues of sovereignty and colonialism will be discussed, as well as the relationships between the tribes and the Dominant Culture, the Bureau of Indian Affairs, Tribal governments, and the Montana and United States governments. The economic, political, social, and cultural conditions affecting everyday lives of the Native Peoples of Montana will be examined. Students will exhibit an empirical understanding of content through written critiques and directed examinations. The course routine and makeup will include lectures, class discussions, small group activities, extensive reading, research, and written assignments. Prereq: ANTH 105 or SOC 115 (SOCI 101), and either ANTH/HIST/POLS/PSY/SOC 220, or ANTH/HIST/POLS/PSY/SOC 221, or ANTH/HIST/POLS/PSY/SOC 222, or ISSS 222; or c/i. (Block 4/fall 2010; Block 2 fall/even-numbered years beginning 2012)

ISSS 441 WORLD RESOURCES (4)
Pre-Fall 2009 UMW course: GEOG/POLS 441 World Resources
Resource scarcities are the source of conflict in many parts of the world, and appropriate and sustainable development is crucial to sustaining the supply of oil, forests, minerals, fish, and other resources. This course examines the nature and distribution of world resources, the potential for conflict over these resources, and potential means of achieving sustainability. Students will be evaluated on written assignments, a term project, and class discussion. Lecture and seminar. Prereq: GEOG 102 (GPHY 121), or ECON 151 (ECNS 101), or ENV 329; and Junior standing; or c/i. (on demand)

ISSS 450 SOCIAL STRATIFICATION (4)
Pre-Fall 2009 UMW course: SOC 450 Social Stratification
Specific topics of interest include industrialization, bureaucracy, urbanization, economic globalization, and cultural imperialism. Students will demonstrate the ability to critically analyze course content through written critiques, independent investigations, and directed examinations. Lecture and small group discussions. Prereq: SOC 115 (SOCI 101), and either ANTH/HIST/POLS/PSY/SOC 220, or ANTH/HIST/POLS/PSY/SOC 221, or ANTH/HIST/POLS/PSY/SOC 222, or ISSS 222, or c/i. (Block 3 fall/even-numbered years)

ISSS 475 CULTURAL ECOLOGY (4)
Pre-Fall 2009 UMW course: ANTH/SOC 475 Cultural Ecology
Cultural Ecology is the study of the interaction between culture and the larger environment. In the case of human beings much of their environmental interaction is learned behavior that has become part of their reserve of learned skills, technology, and other cultural responses. The focus of this class will be the relation between cultural behavior and environmental phenomena. Students will demonstrate the ability to critically analyze course content through written critiques, independent investigations, and directed examinations. Lecture and small group discussions. Prereq: ANTH 105 or SOC 115 (SOCI 101), and either ANTH/HIST/POLS/PSY/SOC 220, or ANTH/HIST/POLS/PSY/SOC 221, or ANTH/HIST/POLS/PSY/SOC 222, or ISSS 222, or c/i. (Block 7 spring/even-numbered years)

ISSS 484 ECONOMIC ANTHROPOLOGY & SOCIOLOGY (4)
Pre-Fall 2009 UMW course: ANTH/SOC 484 Economic Sociology
This course begins with the analysis of the economic relationships found among non-market economies including band, village, and peasant societies. Next students will study historically the incorporation into the world market economy (capitalism) of all people on the planet. The study of existing people today is a study of the combination of two or more economic systems, both continuations of non-capitalist economies together with a larger capitalist system. The course then examines the economic relationships to all other social institutions. The course will explore the debates between the formal economic theory with competing Marxist and the substantivist economics as to the nature of economic history and the impact of globalization on everyday life. Students will exhibit an empirical understanding of content.
through written critiques and directed examinations. The course routine and makeup will include lectures, class discussions, small group activities, extensive reading, research, and written assignments. Prereq: ANTH 105 or SOC 115 (SOCI 101), and either ANTH/HIST/POLS/PSY/SOC 220, or ANTH/HIST/POLS/PSY/SOC 221, or ANTH/HIST/POLS/PSY/SOC 222, or ISSS 222; or c/i. (Block 3 fall/odd-numbered years)

**ISSS 485 GENDER, ECONOMY, & SOCIAL CHANGE (4)**

Pre-Fall 2009 UMW course: ANTH/SOC 485 Gender, Economy, & Social Change

An introduction to the major theories and issues in the anthropology of gender. Focus on gender relations within the broad context of global economic and social change. Specific topics include the investigation of case examples between rural and industrialized regions around the world. Students will demonstrate the ability to critically analyze course content through written critiques, independent investigations, and directed examinations. Lecture and small group discussions. Prereq: ANTH 105 or SOC 115 (SOCI 101), and either ANTH/HIST/POLS/PSY/SOC 220, or ANTH/HIST/POLS/PSY/SOC 221, or ANTH/HIST/POLS/PSY/SOC 222, or ISSS 222; or c/i. (Block 6 spring/odd-numbered years)

**ISSS 490 UNDERGRADUATE RESEARCH (V 2-8)**

Selected topics under faculty supervision. Prereq: ANTH/HIST/POLS/PSY/SOC 220, or ANTH/HIST/POLS/PSY/SOC 221, or ANTH/HIST/POLS/PSY/SOC 222, or ISSS 222, and c/i, c/pc, and c/vc. (on demand)

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**INDUSTRIAL TECHNOLOGY (IT)**

(IT courses offered only at Helena College of Technology)

**IT 110 TECHNICAL WRITING (4)**

The major elements of industrial technical writing. Writing assignments include technical definitions, abstracts and summaries, mechanism descriptions, instructions, process analyses, technical reports, and proposals. Emphasis is placed on clarity, conciseness, organization, format, style, and tone. The course includes an introduction to research methods and documentation. All readings are selected from industrial material.

**IT 120 POWER, ENERGY, & TRANSPORTATION FUNDAMENTALS (4)**

Historical development and contemporary use of current energy sources and their environmental, economic, and social impacts. Specific areas of study include the use of machines, conversion of energy to work, basic electrical concepts, use of electricity as a power source, and two and four stroke engines theory. Students will research, illustrate, and report on future energy technologies. Problem-solving activities will be used to reinforce principles covered in the course. $25 Course Fee.

**IT 130 GRAPHIC COMMUNICATION (3), and IT 130L GRAPHIC COMMUNICATION LAB**

This course deals with a variety of ways to communicate technical information through visual formats. The course is designed to be an introductory course to graphical studies. The main focus of the course is to introduce students to communication techniques utilized in the design/drafting industry. Other topics include digital photography, desktop publishing, and computer slide shows. $25 Course Fee. (spring)

**IT 135 COMPUTER-AIDED DRAFTING (4)**

This course is an introduction to computer-aided design and drafting practices as well as the integrated manufacturing software they drive. Elements of Boolean, wireframe, surface, solid modeling and rendering are all covered in this compact format course. Some of the latest cutting edge software is used to design industrial items in the second area, computer-aided manufacturing. $20 Course Fee. (spring)

**IT 140 METAL MATERIALS & PROCESSES (4), and IT 140L METAL MATERIALS & PROCESSES LAB**

Students will examine metal materials and their atomic structures and applications in industry. Students will learn metallurgical processes of heat treating, casting, and forming. The mechanical properties of materials under stress and thermal conditions will be examined. Other processes examined will include combining and separating ferrous metals, sheet metals, plastics, and natural materials. $50 Course Fee. (spring)

**IT 141 PLASTICS (1)**

This course acquaints the student with the various types of plastics and with the most common methods of production in the plastics industry. Upon successful completion of the course the student will be able to read a drawing and understand common terms and processes, convert a drawing into an object and vice versa, understand technical terms and their use in each area, and produce plastic projects in a variety of areas using various techniques.

**IT 210 HISTORICAL DEVELOPMENTS IN INDUSTRIAL TECHNOLOGY (2)**

Technological developments have changed the direction of history over the years. This course focuses on a select group of these developments and examines their effect on the society and economy of the time. Activities will include the research and fabrication of historical implements. (on demand)

**IT 219 DIRECTED STUDY (V 1-5)**

Selected topics under faculty supervision. Prereq: c/i, c/pc, and c/vc. (fall/spring)
IT 240 APPLIED ELECTRICITY & ELECTRONICS (3) and IT 240L APPLIED ELECTRICITY & ELECTRONICS LAB
Electricity and solid-state electronics concepts; energy; power; electronic instrumentation; Ohm’s law; Watt’s law; Thevenin’s law; Norton’s law; series, parallel and combination circuits, magnetism, direct and alternating current, semiconductors, and power supplies. $25 Course Fee. Prereq: IT 120. (fall)

IT 230 PROJECT MANAGEMENT & STATISTICAL PROCESS CONTROL (3)
The project management portion of this course is about the study of optimizing tasks, times, resources, and costs while finishing projects as planned. The course presents an overview of traditional project management concepts and techniques (e.g., Gantt charts, PERT, CPT), along with several technical issues related to their effective use, as well as the problems associated with effective management and coordination of multiple discrete projects within an overall system. Microsoft Project will be used to manage the individual projects. The statistical process control portion of this course is the study of using statistics to improve product quality. Control charting and interpretation are emphasized; theory and use of statistical process control (SPC) tools for problem solving and continuous improvement; variables and attributes control charts for both discrete and continuous flow/batch process; process capability and performance analysis including strengths and weaknesses of Cpk and Ppk indices; introduction to acceptance sampling. $25 Course Fee. Prereq: IT 130 and IT 140. (fall)

IT 241 MACHINING (3) and IT 241L MACHINING LAB
Students in this course will be introduced to machining principles and metal production systems used for fabrication in industry. Students will fabricate projects using the engine lathe, vertical milling machine, presses, and other metal working machinery and devices. Skills in using micrometers, dial indicators, and dial calipers will be developed. $50 Course Fee. Prereq: IT 130 and IT 140. (fall)

IT 245 WOOD TECHNOLOGY IN INDUSTRY (3)
Students will be introduced to fundamental characteristics of wood and wood products, basic processes for fabrication, skill development, and techniques for project development. Students will examine past and present resource management practices, and contrast past and present wood processing machinery, equipment, and processes. $50 Course Fee. Prereq: IT 130 and IT 140. (fall)

IT 310 TECHNOLOGICAL IMPLICATIONS FOR HUMANITY (3)
Students taking this course will examine historical and contemporary technological developments, and will analyze the social, economic, political, and environmental impact of those technologies on mankind. (fall)

IT 350 STRUCTURAL ANALYSIS & CONSTRUCTION TECHNOLOGY (4)
This course involves the student in analyzing structural materials, construction management practices, and the use of construction techniques. The student will examine structures in the field of residential, commercial, and civil construction. $30 Course Fee. Prereq: all required 100- and 200-level IT courses. (fall)

IT 419 DIRECTED STUDY (V 1-5)
Selected topics under faculty supervision. Prereq: c/i, c/pc, and c/vc. (on demand)
IT 400 MASS PRODUCTION (3)
In this course students will examine a variety of topics and techniques needed to teach "Manufacturing Technology" in the high school and middle school classroom. Students will gain first-hand experience in developing a mass-production course including appropriate projects, building jigs, business, materials handling, research and development, production floor organization, marketing, and shipping and receiving concepts. $35 Course Fee. Prereq: Senior standing. (fall)

IT 450 RESIDENTIAL HOUSE DESIGN & ENERGY MANAGEMENT (3)
This course examines the design considerations and techniques for the residential housing industry. Included is an in-depth study of alternative heating and energy management methods for reducing the operational costs of a home. Prereq: IT 350, or c/i. (fall)

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INFORMATION TECHNOLOGY SYSTEMS (ITS)  
(New OCHE rubric effective Fall 2010)

ITS 176 INTRODUCTION TO ROUTER TECHNOLOGY (4)
Pre-Fall 2010 UMW course: COMS 176 Introduction to Router Technology (CISCO II)
This course covers router theory and router technologies with both lecture and hands-on activities. Topics include beginning router configurations, routed and routine protocols, and introduction to LAN switching. This is the second course in a four-course series that leads toward certification in both the ComITA Network+ and CCNA (Cisco Certified Networking Associate). This course is articulated through Tech Prep. Prereq: c/i. (spring)

ITS 205 COMPUTER HARDWARE & SOFTWARE MANAGEMENT (4)
Pre-Fall 2010 UMW course: COMS 210 Computer Hardware & Software Management
This course provides a basic understanding of how personal computers work. Topics include hardware and software, understanding the motherboard, the CPU, and troubleshooting basics, managing memory, understanding, installing, and troubleshooting disk drives, supporting input, output, and multimedia devices, supporting printers, installing and using operating systems, managing and supporting operating systems, connecting PCs to networks and the Internet, and maintenance and troubleshooting fundamentals. Students will be evaluated by hands-on projects, oral and written assignments, and examinations. $15 Course Fee. Prereq: COMS 101 (CAPP 100), or c/i. (fall)

OCHE matrix
ITS 258 ROUTING & SWITCHING (4)
Pre-Fall 2010 UMW course: COMS 226 Routing & Switching (CISCO III)
This course covers advanced router configurations with both lecture and hands-on activities. Topics include LAN switching, network management, and advanced network design. This is the third course in a four-course series that leads toward certification in both the ComITA Network+ and CCNA (Cisco Certified Networking Associate). This course is articulated through Tech Prep. Prereq: c/i. (spring)

ITS 270 NETWORK DESIGN (4)
Pre-Fall 2010 UMW course: COMS 276 Network Design (CISCO IV)
This course is a project-based course in network design. Topics include advanced network design projects and advanced network management projects. This is the final course in a four-course series that leads toward certification in both the ComITA Network+ and CCNA (Cisco Certified Networking Associate). This course is articulated through Tech Prep. Prereq: c/i, c/pc, and c/vc. (fall/spring)

ITS 403 SYSTEMS ANALYSIS & DESIGN (4)
Pre-Fall 2010 UMW course: COMS 403 Systems Analysis & Design
The information system functions as a service and supports the overall operations of the organization. This course is designed as a capstone; it ties together concepts learned in various computer application courses as well as introductory management courses. This course emphasizes management functions and how they apply to and interrelate with information systems. This course contains a significant project management theory component including the hands-on use of project management software in assisting the analysis and design aspects of the systems project. Students will be evaluated on the basis of performance on examinations, case studies, and completion of a systems project for a selected business/institution. $10 Course Fee. Prereq: COMS 205, COMS 210 (ITS 205), COMS 260 (CAPP 254), and COMS 265 (CAPP 266); or c/i. (fall)

ITS 420 CERTIFICATIONS IN HARDWARE & SOFTWARE (4)
Pre-Fall 2010 UMW course: COMS 420 Certifications in Hardware, Software, & Networking
Students will work closely with their instructor to identify and review nationally recognized hardware, software, and networking exams. Software exams must be at the expert level; hardware and networking exams may be at the core level. Students must pass one exam for each credit taken and are responsible for all exam fees. (fall)

ITS 490 INDEPENDENT STUDY (V 1-4)
This course provides Junior or Senior level students an opportunity to conduct advanced study in areas relating to Industrial Technology, but not covered in regular course offerings. Each student must provide a written prospectus prior to the beginning of the semester in which the student will earn the credit. A summary report is required at the end of the semester with details of the findings of the study. Prereq: Junior/Senior standing, c/i, c/pc, and c/vc. (fall/spring)

ITS 498 SENIOR PROJECT (V 1-3)
This course provides Senior level students with an opportunity to complete research and skill development in areas not covered in graduation requirements. Students will submit a proposal and evaluation criteria at the start of the semester. Upon completion of the course, students will provide a report explaining research and skill development techniques explored along with the findings of the project. Prereq: Senior standing, c/i, c/pc, and c/vc. (fall/spring)
The course will examine the assessment and development of K-12 Supervised field experience in selected phases of library-media center. 

LIB 469 LIBRARY MEDIA PRACTICUM (3)
This class focuses on the evaluation, selection, and use of basic ref-

papers, and examinations of various types of selection tools. Internet only. (UMW-spring/even-

numbered years, summer/odd-numbered years)

LIB 464 REFERENCE RESOURCES (3)
This class focuses on the evaluation, selection, and use of basic ref-

ence resources. It also contains teaching of media skills, information negotiation, search strategies, database use, and information services. Instruction will include research, projects, and discussion. Assessment will be based on participation, written assignments, activities, a major paper or bibliography, or a combination thereof. Internet only. (UMW-fall)

LIB 469 LIBRARY MEDIA PRACTICUM (3)
C&I 485 LIBRARY MEDIA PRACTICUM (3)
Supervised field experience in selected phases of library-media center operations, including assessment. Prereq: 22 credits in library-media coursework and c/i. (summer/spring intermittent; UMM-summer 2010, spring 2011; UMW-summer 2012, spring 2013)

C&I 480 COLLECTION DEVELOPMENT & CURRICULUM (3)
The course will examine the assessment and development of K-12 library collections with specific attention being placed on factors affecting the collection, tools to assist in building the collection, and policies and procedures leading to the creation of a quality library media collection. Students will demonstrate the assimilation of course content through library literature research, oral presentations, written papers, and examinations of various types of selection tools. Internet only. (UMM-fall)

C&I 483 LIBRARY MEDIA TECHNICAL PROCESSES (3)
A presentation of cataloging concepts, standards, basic tools, and automation concerns with particular emphasis on their application in a school library and on developing students’ practical skills as catalogers will be studied. The acquisition and technical services functions of a school library media center will also be examined. Students are expected to demonstrate understanding and comprehension of course content through examinations and writing assignments. Internet only. (UMM-spring)

C&I 484 ADMINISTRATION & ASSESSMENT OF LIBRARY MEDIA (3)
This course consists of organizing and operating a school media center including internal policy and external relations, concepts of professionalism, commitment, and values of school librarianship. Students will develop basic skills that are involved in the administration and management of a K-12 library media program such as budgeting, methodology needed to plan and implement library programs, integrate curriculum, and update library technology. Students will be assessed through written assignments, formal oral presentations, and informal class discussions. Internet only. (UMM-spring/odd-numbered years; summer/odd-numbered years)

C&I 488 LIBRARIES & TECHNOLOGY (3)
The planning and implementation of various technologies in the automa-
tion of library services and the instructional process will be explored. Retrieving and evaluating electronic information and database searching, networking and resources sharing, and telecommunications plus multimedia and the impact of technology on education will be examined. Students will use course content to plan for the automation of a school library media center and incorporate various technologies in the teaching and learning process. Demonstrations, discussions, and projects will be used for instruction with evaluation consisting of papers, presentations, and the creation of a school technology planning document. Internet only. (UMM-spring/even-numbered years; summer/odd-numbered years)

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LIT 162 FOLK & FAIRY TALES (4)
Pre-Fall 2009 UMW course: ENG 162 Folk & Fairy Tales
A comparison of folk and fairy tales common to numerous cultures throughout the world and over time, as well as an examination of unique stories with folk origins. Special emphasis will be given to the multi-cultural aspects of the study of folk literature, as well as the importance of fairy tales in the education and development of children. A variety of teaching and learning practices are included in this course: e.g., traditional lecture, oral readings, group discussions, creative and/or analytical writing, listening activities, oral and/or dramatic presentations, visits with authors, interviews, internet and off-campus activities, research practice, etc. Prereq: ENG 102 (WRIT 101), or c/i.

LIT 163 FANTASY & SCIENCE FICTION (4)
Pre-Fall 2009 UMW course: ENG 163 Fantasy & Science Fiction
A study of the genre of science fiction and fantasy from its origins to the present day, with particular emphasis on how it voices contemporary concerns. Authors may include H.G. Wells, Jules Verne, J.R.R. Tolkien, C.S. Lewis, Philip K. Dick, and Ursula K. LeGuin. A variety of teaching and learning practices are included in this course: e.g., traditional lecture, oral readings, group discussions, creative and/or analytical writing, listening activities, oral and/or dramatic presentations, visits with authors, interviews, internet and off-campus activities, research practice, etc. Prereq: ENG 102 (WRIT 101), or c/i.

LIT 166 LITERATURE & POLITICS (4)
Pre-Fall 2009 UMW course: ENG 166 Literature & Politics
A study of the way literature interacts with political life. Examples may be taken from a wide variety of time periods and cultures. The course will involve students in relating literature to real-life issues. A variety of teaching and learning practices are included in this course: e.g., traditional lecture, oral readings, group discussions, creative and/or analytical writing, listening activities, oral and/or dramatic presentations, visits with authors, interviews, internet and off-campus activities, research practice, etc. Prereq: ENG 102 (WRIT 101), or c/i.

LIT 167 LITERATURE & GENDER (4)
Pre-Fall 2009 UMW course: ENG 167 Literature & Gender
An examination of the issue of gender in literature in different cultures and time periods. The course will focus on the construction of gender roles, and may include issues of femininity, masculinity, and gay and lesbian orientations. A variety of teaching and learning practices are included in this course: e.g., traditional lecture, oral readings, group discussions, creative and/or analytical writing, listening activities, oral and/or dramatic presentations, visits with authors, interviews, internet and off-campus activities, research practice, etc. Prereq: ENG 102 (WRIT 101), or c/i.

**LIT 168 LITERATURE & THE ENVIRONMENT (4)**

*Pre-Fall 2009 UMW course: ENG 168 Literature & the Environment*

This course probes the whole idea of being at home in the natural world. It foregrounds ways in which physical environment directly affects human lives. It studies how the outdoors—whether wilderness areas, urban landscapes, or something in between—shapes and changes people, in some cases enabling them to aesthetically and morally redefine themselves. A variety of teaching and learning practices are included in this course: e.g., traditional lecture, oral readings, group discussions, creative and/or analytical writing, listening activities, oral and/or dramatic presentations, visits with authors, interviews, internet and off-campus activities, research practice, etc. Prereq: ENG 102 (WRIT 101), or c/i.

**LIT 169 LITERATURE AS POPULAR CULTURE (4)**

*Pre-Fall 2009 UMW course: ENG 169 Literature as Popular Culture*

This course examines ways in which particular literary texts capture and reflect defining characteristics of popular culture at a given time. In some cases, such texts may themselves be best sellers rather than works regarded over time as literary masterworks. The divergence between best sellers and literary masterworks invites analysis of the whole notion of literary reception. A variety of teaching and learning practices are included in this course: e.g., traditional lecture, oral readings, group discussions, creative and/or analytical writing, listening activities, oral and/or dramatic presentations, visits with authors, interviews, internet and off-campus activities, research practice, etc. Prereq: ENG 102 (WRIT 101), or c/i.

**LIT 210 AMERICAN LITERATURE I (4)**

*Pre-Fall 2009 UMW course: ENG 263 Early American Voices*

Contrary to some stereotypes, the area that became the United States yielded a rich and diverse literature before white settlement. This course surveys early Native American voices as well as the literature of explorers, slaves, and colonists. It surveys, too, changes in patterns of literary imitation, as well as theme and style, from the colonial period through the early decades of U.S. independence. A variety of teaching and learning practices are included in this course: e.g., traditional lecture, oral readings, group discussions, creative and/or analytical writing, listening activities, oral and/or dramatic presentations, visits with authors, interviews, internet and off-campus activities, research practice, etc. Prereq: ENG 102 (WRIT 101), or c/i. (spring/odd-numbered years)

**LIT 218 VISIONS OF AMERICA (4)**

*Pre-Fall 2009 UMW course: ENG 280 Visions of America*

This course examines imagery about the U.S. derived not from literary texts but from older and contemporary popular media. Students will study the origins and perpetuation of various stereotypes according to popular music and visual languages, both print and electronic media. Students gain an understanding of a visual literacy based upon a self-conscious, critical approach to these languages. A variety of teaching and learning practices are included in this course: e.g., traditional lecture, oral readings, group discussions, creative and/or analytical writing, listening activities, oral and/or dramatic presentations, visits with authors, interviews, internet and off-campus activities, research practice, etc. Prereq: ENG 102 (WRIT 101), or c/i.

**LIT 265 REALISTS, NATURALISTS, MODERNISTS (4)**

*Pre-Fall 2009 UMW course: ENG 265 Realists, Naturalists, Modernists*

Surveying the late-19th and early-20th centuries in American literature, this course analyzes several reactions to earlier notions of American romance. All genres reveal significant changes in allegiance to other literary paradigms. During this diverse period writers embrace what they construe as realism, naturalism, and differing versions of modernism (e.g., symbolism), and in most cases, they construct their worlds differently from their predecessors. A variety of teaching and learning practices are included in this course: e.g., traditional lecture, oral readings, group discussions, creative and/or analytical writing, listening activities, oral and/or dramatic presentations, visits with authors, interviews, internet and off-campus activities, research practice, etc. Prereq: ENG 102 (WRIT 101), or c/i. (fall/odd-numbered years)

**LIT 266 GENERATIONS & CONFLICTS (4)**

*Pre-Fall 2009 UMW course: ENG 266 Generations & Conflicts*

This course will locate various trends in 20th century American literature from modernism to postmodern sensibility. As the U.S. grew as a global military and economic power, its literature reflected a growing sense of isolation, hopelessness, despair, and disenfranchisement. From the expatriates early in the century to the beats mid-century and beyond, the 20th century may well be the century when American literature found its voice, a voice strengthened by its fragmentation. A variety of teaching and learning practices are included in this course: e.g., traditional lecture, oral readings, group discussions, creative and/or analytical writing, listening activities, oral and/or dramatic presentations, visits with authors, interviews, internet and off-campus activities, research practice, etc. Prereq: ENG 102 (WRIT 101), or c/i. (spring/odd-numbered years)

**LIT 273 THE ORAL TRADITION (4)**

*Pre-Fall 2009 UMW course: ENG 273 The Oral Tradition*

A study of oral literature. Possible authors may include Homer and the Beowulf-poet. Possible types of literature may include the myths, legends, and folk tales passed down by word of mouth in a variety of different cultures. Emphasis will be on the relationship between the oral literature of a given period and larger social issues. A variety of teaching and learning practices are included in this course: e.g., traditional lecture, oral readings, group discussions, creative and/or analytical writing, listening activities, oral and/or dramatic presentations, visits with authors, interviews, internet and off-campus activities, research practice, etc.
LIT 277 THE PRINT CULTURE (4)
Pre-Fall 2009 UMW course: ENG 277 The Manuscript Tradition
A study of the literature of literate cultures before the invention of printing. The course may cover the period of British literature from Old English (Beowulf) to the beginning of the Renaissance, or more recent manuscript traditions in other cultures. Emphasis will be on the relationship between the literature of a given period and its surrounding milieu. A variety of teaching and learning practices are included in this course: e.g., traditional lecture, oral readings, group discussions, creative and/or analytical writing, listening activities, oral and/or dramatic presentations, visits with authors, interviews, internet and off-campus activities, research practice, etc. Prereq: ENG 102 (WRIT 101), or c/i. (fall/even-numbered years)

LIT 277 THE DECLINING EMPIRE (4)
Pre-Fall 2009 UMW course: ENG 276 The Declining Empire
A study of literature beginning with the end of the Boer War and relating to the decline of the British Empire through the 20th century. Texts may include those from formerly colonized countries and commonwealth countries. Emphasis will be on the literature as related to historical, cultural, and artistic movements. A variety of teaching and learning practices are included in this course: e.g., traditional lecture, oral readings, group discussions, creative and/or analytical writing, listening activities, oral and/or dramatic presentations, visits with authors, interviews, internet and off-campus activities, research practice, etc. Prereq: ENG 102 (WRIT 101), or c/i. (fall/even-numbered years)

LIT 277 THE PRINT CULTURE (4)
Pre-Fall 2009 UMW course: ENG 275 The Print Culture
A study of literature as affected by the invention of printing. The material covered will extend through the 19th century when new developments in printing technology and paper made mass-market literature available for the first time. The course will focus mainly on material from Britain and its empire. Emphasis will be on the relationship between the literature and intellectual and social history. A variety of teaching and learning practices are included in this course: e.g., traditional lecture, oral readings, group discussions, creative and/or analytical writing, listening activities, oral and/or dramatic presentations, visits with authors, interviews, internet and off-campus activities, research practice, etc. Prereq: ENG 102 (WRIT 101), or c/i. (spring/odd-numbered years)

LIT 282 CHILD & YOUNG ADULT LITERATURE (4)
Students survey literature for children and young adults. A critical student learning outcome is an understanding of the development in the 19th and 20th centuries of literature for youth as a distinct literary category. Students compare past works with diverse present-day content and forms, including novels, Native American literature, poetry, film and play scripts, picture books, graphic novels, periodicals, and computer games. Classic and award-winning materials are emphasized. Students develop an understanding of oral and folk traditions that preceded print and electronic publication, including indigenous oral traditions. Each student completes a reflective reading journal and an individualized research project. Students are assessed on the breadth of their reading, and the depth of oral and written presentations. Experiential learning activities include small group work, guided library research, and peer editing. (spring on campus; summer via internet)

LIT 290 UNDERGRADUATE RESEARCH (V 2-8)
Selected topics under faculty supervision. Prereq: c/i, c/pc, and c/ve. (fall/spring)

LIT 300 LITERARY CRITICISM (4)
Pre-Fall 2009 UMW course: ENG 279 Fundamentals of Literary Theory
This course will introduce students to some of the leading schools of contemporary literary theory and their application. Topics to be considered may include the following: structuralism, deconstruction, psychoanalysis, feminism, new historicism, post-colonialism, post-modernism, gay and lesbian studies, and cultural studies. This course should enable students to read contemporary criticism with understanding and to attempt theoretically informed criticism themselves. A variety of teaching and learning practices are included in this course: e.g., traditional lecture, oral readings, group discussions, creative and/or analytical writing, listening activities, oral and/or dramatic presentations, visits with authors, interviews, internet and off-campus activities, research practice, etc. Prereq: ENG 102 (WRIT 101), or c/i. (spring)

LIT 302 LITERATURE IN TRANSLATION (4)
Pre-Fall 2009 UMW course: ENG 320 Literature in Translation
Exploration of the great themes, issues, and conflicts of human existence as they are reflected in works representing a variety of non-English genres, cultures, and ethnic groups. The literature under study comes from a variety of cultures. Instructional activities will include a combination of lecture, group discussion, and other experientially-based activities. (spring)

LIT 335 WOMEN & LITERATURE (4)
Pre-Fall 2009 UMW course: ENG 362 Seminar in Women’s Literature
Explores the cultural roles of women through works written by and for women. The course content will focus according to professor’s specialty and may center on a specific theme, movement, culture, period, event, or genre. Course instruction will be a combination of lecture, group discussion, and other experientially-based activities. (spring/odd-numbered years)

LIT 339 LITERARY REGIONS (4)
Pre-Fall 2009 UMW course: ENG 339 Literary Regions
Long a dismissive concept in literary history, regionalism has recently become a privileged mode and term for analysis in literature. This course evaluates the validity of literary regionalism through surveying past and present literature of a given region. (spring/even-numbered years)

LIT 361 POETRY & THOUGHT (4)
Pre-Fall 2009 UMW course: ENG 361 Poetry & Thought
This course explores how we come to construct meaning in the context of poetic thought, and how this construct carries over to our understanding of the events of our everyday lives; experiences too easily informed by ambiguity, metaphor, and simile. This course will involve students in lecture, group discussions, and readings. (fall/odd-numbered years)

LIT 382 LITERATURE FOR CHILDREN & ADOLESCENTS (4)
Students survey an extensive body of literature for children and adolescents. A critical student learning outcome is an understanding of the development in the 19th and 20th centuries of literature for youth as a distinct literary category. Students compare past works with diverse present-day content and forms, including novels, Native American literature, poetry, film and play scripts, picture books, graphic novels, periodicals, and computer games. Classic and award-winning materials are emphasized. Students develop an understanding of oral and folk traditions that preceded print and electronic publication, including indigenous oral traditions. Each student completes a reflective reading journal and an individualized research project. Students are assessed on the breadth of their reading, the depth of oral and written presentations, and their use of standard terms and tools of literary analysis. Experiential learning activities include small group work, guided library research, and peer editing. (spring on campus; summer via internet)
**LIT 385 MYTHOLOGY (4)**
Pre-Fall 2009 UMW course: ENG 330 Mythology
Students will explore the mythologies of various cultures, such as the ancient Greeks, Vikings, Romans, Egyptians, Chinese, and indigenous Americans including but not limited to mythology of Montana American Indians. Special emphasis will be placed on similarities these stories highlight among such cultures. Instructional activities will include a combination of lecture, group discussion, and other experientially-based activities. (spring/odd-numbered years)

**LIT 441 DRAMA HISTORY & LITERATURE GENRE (4)**
Pre-Fall 2009 UMW course: DR/ENG 441 Drama History & Literature Genre
This course provides students with an opportunity to study theatre history and to examine important plays of various historical epochs. It examines selected plays central to the development of Western drama, with critical emphasis on a cultural, historical, and theatrical analysis of these works. Upon completion of this course students will have analyzed, compared, and performed works from major periods of Greek and Roman drama, medieval drama, theatre of the English Renaissance, French neoclassical drama, romanticism, naturalism, and realism, and major dramatic currents of the 20th century. (fall/even-numbered years)

**LIT 473 STUDIES IN SHAKESPEARE (4)**
Pre-Fall 2009 UMW course: DR/ENG 455 Shakespeare
Through reading, discussion, lecture, and enactment of scenes, learners study several of Shakespeare’s plays and a number of his sonnets. Students are assessed according to their ability to recognize elements of dramatic structure, interpret meaning, analyze literary elements such as character and theme, draw connections to the milieu in which Shakespeare wrote, and make critical responses. Students may be asked to demonstrate competencies through written work, oral presentations, and/or examinations. (spring/even-numbered years)

**LIT 479 STUDIES IN LITERARY THEORY (4)**
Pre-Fall 2009 UMW course: ENG 479 Seminar in Literary Theory
Investigation in some depth of one or more contemporary literary theories. Students will further their understanding of theories introduced in ENG 279/379. Focus will be on primary texts of particular theoretical schools. This course is intended to develop both depth and breadth of students’ knowledge and will result in a paper showcasing each student’s understanding through application to a literary text. Instructional activities will include a combination of lecture, group discussion, and other experientially-based activities. Prereq: ENG 279 (LIT 300).

**LIT 490 UNDERGRADUATE RESEARCH (V 2-8)**
Selected topics under faculty supervision. Prereq: c/i, c/pc, and c/ve. (on demand)

**LIT 492 INDEPENDENT STUDY (V 1-4)**
Pre-Fall 2009 UMW course: ENG 490 Independent Study
Directed research or study on an individual basis. Prereq: c/i, c/pc, and c/ve. (fall/spring)

**LIT 494 SEMINAR: LITERARY PERIOD (V 1-4) R**
Pre-Fall 2009 UMW course: ENG 452 Seminar in Literary Period
Consideration of the works of major writers during a specific literary period such as Seventeenth Century, Romantic, American Renaissance, Victorian. Selection of period will vary. Repeatable for credit under a separate topic.

**LIT 494 SEMINAR: GENRE (V 1-4) R**
Pre-Fall 2009 UMW course: ENG 454 Authors Seminar
In this course, the works of a single writer or works by a cluster of writers related thematically, geographically, historically, and/or ideologically will be studied. Such a study will help develop in the student an appreciation not only for the continuity within a writer’s oeuvre, but also the diversity within the same writings. Repeatable for credit under a separate topic.

**LIT 494 SEMINAR: MAJOR AUTHORS (V 1-4) R**
Pre-Fall 2009 UMW course: ENG 454 Authors Seminar
In this course, the works of a single writer or works by a cluster of writers related thematically, geographically, historically, and/or ideologically will be studied. Such a study will help develop in the student an appreciation not only for the continuity within a writer’s oeuvre, but also the diversity within the same writings. Repeatable for credit under a separate topic.

**LIT 498 INTERNSHIP/COOPERATIVE EDUCATION/OMNIBUS (V 1-15)**
Pre-Fall 2009 UMW course: ENG 400 Coop Ed/Internship
This experience incorporates an appropriate work experience into students’ academic preparation. Students apply their knowledge and skills in professional settings under supervision. Prereq: Senior standing, c/i, c/pc, and c/ve. (fall/spring)

**LIT 499 SENIOR PROJECT/THESIS (V 1-15)**
Pre-Fall 2009 UMW course: ENG 498 Senior Project/Thesis
An individual project or thesis closely associated with the student’s academic program and career goals. Student works with one selected faculty member. Prereq: Senior standing, c/i, c/pc, and c/ve. (fall/spring)

Note: New OCHE Common Course Numbering system rubrics and courses are displayed in *italics* throughout this Catalog.

**MATHEMATICS (M)**

**M 095 INTERMEDIATE ALGEBRA (4)**
Pre-Fall 2009 UMW course: MATH 007 Algebra
In this course, numbers, variables, and symbols are studied. Students learn to graph a library of basic functions, their shifts and stretches. An elementary set of operations and solution methods for linear, quadratic, rational, and radical forms and equations is developed. In addition, basic arithmetic operations necessary for the basic algebra described above are reviewed. (fall/spring)

All mathematics courses beyond this level satisfy the Mathematics General Education requirement.

**Math Proficiency:** Prerequisite for all 100-level Math courses is one of the following: MATH 007/M 095 grade C- or higher, or C- or higher in any MATH 100-level (or higher) course, or score of 70% or higher on the UMW Math Placement Test, or score of 22 or higher on the Math section of the ACT, or score of 520 or higher on the Math section of the SAT, or c/i.

**M 103 GAME THEORY (4)**
Pre-Fall 2009 UMW course: MATH 103 Game Theory
Game theory studies how individuals make decisions when their actions affect each other. Topics to be covered in this course may include dominance, Nash equilibrium, mixed-strategy Nash equilibrium, the Prisoner’s dilemma, oligopolies, auctions, bargaining, cooperative games, and evolutionary game theory. Upon successful completion of this course, the student should be able to formulate and
analyze game-theoretic models for various economic, political, social, and biological phenomena. Prereq: MATH 007 (M 095) grade C- or higher, or meet one Math Proficiency standard above; or c/i.

M 106 LINEAR MATHEMATICS (4)
Pre-Fall 2009 UMW course: MATH 102 Linear Mathematics
This course is an introductory course in linear algebra. Upon successful completion of this course, the student should be familiar with solving systems of linear equations, matrix algebra, linear programming, Markov processes, and Gauss-Jordan elimination. The student will also be introduced to appropriate technology used in solving linear algebra problems. Prereq: MATH 007 (M 095) grade C- or higher, or meet one Math Proficiency standard above; or c/i.

M 107 INTRODUCTORY GEOMETRY (4)
Pre-Fall 2009 UMW course: MATH 106 Geometry
Upon successful completion of this course, the student should be familiar with introductory geometry, geometric constructions, congruence, similarity, measurement, and coordinate geometry. The student should exhibit competence in using congruence and similarity to solve geometric problems, completing geometric constructions and introductory proofs, and the ability to communicate using mathematical terminology. Prereq: MATH 007 (M 095) grade C- or higher, or meet one Math Proficiency standard above; or c/i. (fall)

M 112 TRIGONOMETRY & COMPLEX NUMBERS (4)
Pre-Fall 2009 UMW course: MATH 112 Trigonometry & Complex Numbers
The emphasis of this course is a broad study of trigonometric functions. Triangular trigonometry, complex variables, polar coordinates, and other applications of trigonometry are also introduced. Prereq: MATH 007 (M 095) grade C- or higher, or meet one Math Proficiency standard above; or c/i. (fall)

M 119 INTRODUCTION TO NUMBER THEORY (4)
Pre-Fall 2009 UMW course: MATH 105 Number Theory
In this course, the student will study the development and properties of number systems. This includes the study of the real numbers and algorithms that use them. It also includes the study of number sequences and number patterns. Prereq: MATH 007 (M 095) grade C- or higher, or meet one Math Proficiency standard above; or c/i. (fall/spring)

M 125 MORPHOMETRICS (4)
Pre-Fall 2009 UMW course: MATH 107 Morphometrics
Morphometrics is the mathematical study of shape. This course will investigate how shapes from the natural world are represented mathematically. Upon successful completion of this course, the student should be able to use algebraic functions to model form, use spline techniques to establish deformation grids between forms, use fractal geometry to model self-similar forms, and describe the shape of the universe. The student will be introduced to appropriate technology used in modeling shape. Prereq: MATH 007 (M 095) grade C- or higher, or meet one Math Proficiency standard above; or c/i. (spring/odd-numbered years)

M 127 TOPICS IN MATHEMATICS (4)
Pre-Fall 2009 UMW course: MATH 109 Topics in Mathematics
Introductory mathematical topics appropriate for students with a background in intermediate algebra. This course will investigate an instructor-selected area of mathematics that involves reflective-analytic, mathematical reasoning, and computational components. Prereq: MATH 007 (M 095) grade C- or higher, or meet one Math Proficiency standard above; or c/i.

M 128 LOGIC (4)
Pre-Fall 2009 UMW course: MATH 101 Logic
Upon successful completion of this introductory course in logic, students will be able to identify various types of arguments and ways of analyzing and evaluating these arguments. Emphasis will be placed upon using the techniques of modern symbolic logic as a means of analyzing and evaluating formal arguments. In using these techniques, students will develop their abilities to analyze and resolve complex deductive problems. Among the topics typically covered are tautologies, fallacies, syllogisms, causal hypotheses, logic diagrams, truth tables, argument analysis, truth-functional reasoning, and applications to logic circuits. Prereq: MATH 007 (M 095) grade C- or higher, or meet one Math Proficiency standard above; or c/i.

M 171 CALCULUS I (4)
Pre-Fall 2009 UMW course: MATH 201 Calculus I
This is the first course in the calculus sequence. This course will provide the student with an introduction to differential and integral calculus. The student will investigate functions in one variable geometrically, numerically, and algebraically. Topics are introduced by the investigation of practical problems and include limits, continuity, derivatives, antiderivatives, and the Fundamental Theorem of Calculus. Prereq: MATH 112 (M 112) grade C- or higher, evidence of grade C- or higher in high school trigonometry; or c/i. (fall/spring)

M 172 CALCULUS II (4)
Pre-Fall 2009 UMW course: MATH 202 Calculus II
This is the second course in the calculus sequence. This course will provide the student with a more comprehensive knowledge of differential and integral calculus. As a continuation of MATH 201 (M 171), the student will investigate practical problems geometrically, numerically, and algebraically. Several different integration techniques will be introduced and applied. The student will also encounter elementary differential equations through applications, as well as continue the study of limits and convergence via improper integrals and Taylor series. Prereq: MATH 201 (M 171) grade C- or higher, or c/i. (spring)

M 201 COMPUTER MATHEMATICS (4)
Pre-Fall 2009 UMW course: MATH 210 Computer Mathematics
This course is designed to provide students with basic computer skills that are applicable to the mathematical sciences. This will include programming in matrix-vector based languages such as MATLAB or OCTAVE, symbolic languages such as Mathematica or Maple, and typesetting mathematical writing with the aid of LATEX2E. Prereq: Any 100-400 level mathematics course grade C- or higher, or c/i.

M 221 INTRODUCTION TO LINEAR ALGEBRA (4)
Pre-Fall 2009 UMW course: MATH 260 Linear Algebra
Upon successful completion of this course, the student should be familiar with the vocabulary and notation of matrix and vector algebra and should exhibit competence in computing (algebraically and with the aid of computer software) solutions to systems of linear equations, determinants, eigenvalues, and eigenvectors. The student should also become acquainted with linear transformations, abstract vector spaces, and matrix factorizations. Topics will be motivated and will culminate with relative applications. Prereq: MATH 201 (M 171) grade C- or higher, or c/i. (fall/odd-numbered years)

M 273 MULTIVARIABLE CALCULUS (4)
Pre-Fall 2009 UMW course: MATH 233 Calculus III
This third course in the calculus sequence emphasizes multivariate calculus. Upon successful completion of this course, the student should be familiar with polar, spherical, and cylindrical coordinates; parametric curves; vectors in the plane and space; differentiation and integration of functions of several variables; and applications. The student should exhibit competence in using differentiation and integration to solve problems of motion and force and in implementing different coordinate systems. The student will demonstrate the ability to reason, visualize in space, implement appropriate technologies, and communicate using
An introduction to discrete and continuous time models that arise from

Pre-Fall 2009 UMW course: M 311 Ordinary Differential Equations
This course is designed to introduce students to differential equations and how they are used to model problems in engineering and science (e.g., radioactive decay, population models, mechanical and electrical vibrations). Students will gain proficiency in analyzing and solving first- and second-order differential equations and differential systems using analytical, numerical, and qualitative methods. Prereq: MATH 202 (M 172) and MATH 260 (M 221) grade C- or higher; or c/i.

M 274 INTRODUCTION TO DIFFERENTIAL EQUATIONS (4)

Pre-Fall 2009 UMW course: MATH 311 Ordinary Differential Equations

M 290 UNDERGRADUATE RESEARCH (V 2-8)
Selected topics under faculty supervision. Prereq: c/i, c/pc, and c/vc. (on demand)

M 292 INDEPENDENT STUDY (V 1-4)
Pre-Fall 2009 UMW course: MATH 290 Independent Study
Directed research or study on an individual basis. Prereq: c/i, c/pc, and c/vc. (on demand)

M 329 MODERN GEOMETRY (4)
Pre-Fall 2009 UMW course: MATH 341 College Geometry
Upon successful completion of this course, the student should be familiar with deductive and inductive reasoning and with the axioms and theorems of Euclidean and non-Euclidean geometries and the historical context in which they came about. The student should exhibit competence in performing geometric constructions both by hand and with the aid of computer software, in proving geometric theorems in both Euclidean and non-Euclidean geometries, and in solving a variety of problems based upon the geometric properties studied. Prereq: Sophomore standing, or c/i. (fall)

M 341 METHODS & MATERIALS IN MATHEMATICS (4)
See EDU 497 Methods: 5-12 Mathematics
Pre-Fall 2009 UMW course: MATH 351 Methods & Materials in Mathematics

M 343 FOUNDATIONS OF MATHEMATICS (4)
Pre-Fall 2009 UMW course: MATH 343 Foundations of Mathematics
Upon successful completion of this course, the student should be familiar with techniques of writing mathematical proofs using direct, contrapositive, contradiction, and induction methods. In addition, the student will be introduced to some fundamental ideas used throughout mathematics including logic, set theory, number theory, complex numbers, function theory, group theory, and the historical contexts in which these concepts came about. Prereq: Sophomore standing, or c/i. (fall)

M 414 DETERMINISTIC MODELS (4)
Pre-Fall 2009 UMW course: MATH 401 Deterministic Modeling
An introduction to discrete and continuous time models that arise from the study of dynamical systems designed to model phenomena that occur in nature. Difference equation, matrix equation, and ordinary differential equation models will be formulated for a broad range of applications and analyzed both analytically and numerically. Prereq: MATH 202 (M 172) grade C- or higher, or c/i. (spring/odd-numbered years)

M 431 ABSTRACT ALGEBRA I (4)
Pre-Fall 2009 UMW course: MATH 443 Abstract Algebra
An introduction to the fundamental algebraic structures such as groups, rings, and fields. Prereq: MATH 343 (M 343) grade C- or higher, or c/i. (fall)

M 435 ADVANCED CALCULUS I (4)
Pre-Fall 2009 UMW course: MATH 441 Advanced Calculus
An introduction to the fundamental concepts in calculus such as limits, continuity, differentiability, convergence, sequences, series, and integrability. Prereq: MATH 203 (M 273) and MATH 343 (M 343) grade C- or higher, or c/i.

M 441 ADVANCED NUMBER THEORY (4)
Pre-Fall 2009 UMW course: MATH 444 Advanced Number Theory
An introduction to the principal ideas of number theory such as divisibility, congruencies, linear Diophantine equations, Fermat’s Theorem, Euler’s Theorem, Pythagorean Triples, and the distribution of primes. Prereq: MATH 343 (M 343) grade C- or higher, or c/i.

M 472 INTRODUCTION TO COMPLEX ANALYSIS (4)
Pre-Fall 2009 UMW course: MATH 442 Complex Variables
An introduction to topics in complex variables such as functions, limits, derivatives, integrals, the Cauchy-Riemann conditions, series representation of functions, the Cauchy Integral formula, and elementary conformal mappings. Prereq: MATH 203 (M 273) and MATH 343 (M 343) grade C- or higher, or c/i.

M 490 UNDERGRADUATE RESEARCH (V 2-8)
Selected topics under faculty supervision. Prereq: c/i, c/pc, and c/vc. (on demand)

M 492 INDEPENDENT STUDY (V 1-4)
Pre-Fall 2009 UMW course: MATH 490 Independent Study
Directed research or study on an individual basis. Prereq: c/i, c/pc, and c/vc. (on demand)

M 498 INTERNSHIP/COOPERATIVE EDUCATION/OMNIBUS (V 1-15)
Pre-Fall 2009 UMW course: MATH 498 Internship/Coop Ed/Internship
This is intended as a culminating course for students who wish to incorporate an appropriate work experience within their academic education. The student will actively participate in a mathematically-related work experience that should provide her/him with an understanding of how mathematics is applied in industry. Assessment will be by both written and oral consultation with the student’s academic advisor. Prereq: Senior standing, c/i, c/pc, and c/vc.

M 499 SENIOR PROJECT/THESIS (V 1-15)
Pre-Fall 2009 UMW course: MATH 499 Senior Project/Thesis
This is intended as a culminating course for students who wish to incorporate an individually pursued thesis topic within their academic education. The student will complete an appropriate thesis in conjunction with his/her advisor. Assessment will be based on both a written document and oral presentation upon completion of the thesis. Prereq: Senior standing, c/i, c/pc, and c/vc. (fall/spring)
Note: New OCHE Common Course Numbering system rubrics and courses are displayed in italics throughout this Catalog.

MATHEMATICS (MATH)

[For OCHE equivalent courses effective Fall 2009, see appropriate rubric & course listed under individual courses]

NOTE: Credit for MATH 007/MATH 095 is not applicable to graduation; credit may not count as part of load for financial aid purposes; credit may not count as part of load for eligibility purposes. Grades, honor/grade points, or credits for MATH 007/MATH 095 are not used in calculation of the GPA.

MATH 007 ALGEBRA (4)
See M 095 Intermediate Algebra

NOTE: Credit for MATH 007/MATH 095 is not applicable to graduation; credit may not count as part of load for financial aid purposes; credit may not count as part of load for eligibility purposes. Grades, honor/grade points, or credits for MATH 007/MATH 095 are not used in calculation of the GPA.

All mathematics courses beyond this level satisfy the Mathematics General Education requirement.

Math Proficiency: Prerequisite for all 100-level Math courses is one of the following: MATH 007/M 095 grade C- or higher, or C- or higher in any MATH 100-level (or higher) course, or score of 70% or higher on the UMW Math Placement Test, or score of 22 or higher on the Math section of the ACT, or score of 520 or higher on the Math section of the SAT, or c/i.

MATH 101 LOGIC (4)
See M 128 Logic

MATH 102 LINEAR MATHEMATICS (4)
See M 106 Linear Mathematics

MATH 103 GAME THEORY (4)
See M 103 Game Theory

MATH 105 NUMBER THEORY (4)
See M 119 Introduction to Number Theory

MATH 106 GEOMETRY (4)
See M 107 Introductory Geometry

MATH 107 MORPHOMETRICS (4)
See M 125 Morphometrics

MATH 109 TOPICS IN MATHEMATICS (4)
See M 127 Topics in Mathematics

Most mathematics courses beyond this level make use of an appropriate graphing calculator. Students should contact the Department of Mathematics at 683-7274 for information regarding the recommended calculator.

MATH 112 TRIGONOMETRY & COMPLEX NUMBERS (4)
See M 112 Trigonometry & Complex Numbers

MATH 131 PROBABILITY (4)
See STAT 121 Probability

MATH 201 CALCULUS I (4)
See M 171 Calculus I

MATH 202 CALCULUS II (4)
See M 172 Calculus II

MATH 203 CALCULUS III (4)
See M 273 Multivariable Calculus

MATH 210 COMPUTER MATHEMATICS (4)
See M 210 Computer Mathematics

MATH 219 DIRECTED STUDY (V 1-4)
Selected topics under faculty supervision. Prereq: c/i, c/pc, and c/vc. (on demand)

MATH 232 STATISTICS (4)
See STAT 217 Intermediate Statistical Concepts

MATH/BIO 233 BIOSTATISTICS (4)
See STAT 233 Biostatistics

MATH 260 LINEAR ALGEBRA (4)
See M 221 Introduction to Linear Algebra

MATH 290 INDEPENDENT STUDY (V 1-4)
See M 292 Independent Study

MATH 311 ORDINARY DIFFERENTIAL EQUATIONS (4)
See M 274 Introduction to Differential Equations

MATH/BIO 331 BIOINFORMATICS (4)
See STAT 331 Bioinformatics

MATH/BIO 332 ADVANCED FIELD STATISTICS (4)
See STAT 335 Advanced Field Statistics

MATH 333 MATHEMATICAL STATISTICS (4)
See STAT 422 Mathematical Statistics

MATH 341 COLLEGE GEOMETRY (4)
See M 329 Modern Geometry

MATH 343 FOUNDATIONS OF MATHEMATICS (4)
See M 343 Foundations of Mathematics

MATH 351 METHODS & MATERIALS IN MATHEMATICS (4)
See EDU 497 Methods: 5-12 Mathematics

MATH 400 COOPERATIVE EDUCATION/INTERNSHIP (V 4-12) R
See M 498 Internship/Cooperative Education/Omnibus

MATH 401 DETERMINISTIC MODELING (4)
See M 414 Deterministic Models

MATH 419 DIRECTED STUDY (V 1-4)
Selected topics under faculty supervision. Prereq: c/i, c/pc, and c/vc. (on demand)

MATH 433 STOCHASTIC MODELING (4)
See STAT 433 Stochastic Modeling

MATH 441 ADVANCED CALCULUS (4)
See M 435 Advanced Calculus I

MATH 442 COMPLEX VARIABLES (4)
See M 472 Introduction to Complex Analysis
MATH 443 ABSTRACT ALGEBRA (4)  
See M 431 Abstract Algebra

MATH 444 ADVANCED NUMBER THEORY (4)  
See M 444 Advanced Number Theory

MATH 490 INDEPENDENT STUDY (V 1-4)  
See M 492 Independent Study

MATH 498 SENIOR PROJECT/THESIS (V 4-12) R  
See M 499 Senior Project/Thesis

Note: New OCHE Common Course Numbering system rubrics and courses are displayed in italics throughout this Catalog.

MUSIC (MUS)  
[For OCHE equivalent courses effective Fall 2010, see appropriate rubric & course listed under individual courses]

MUS 101 MUSIC FUNDAMENTALS/PIANO (2/4)  
See MUSI 103 Fundamentals of Musical Creation

MUS 113 INSTRUMENTAL ENSEMBLE (1) R  
Music for different combinations of instruments to enrich the experience of qualified performers. Prereq: c/i. (fall/spring)

MUS 114 ORCHESTRAL INSTRUMENTS (1) R  
Private lessons on orchestral instruments. Prereq: c/i. (fall/spring)

MUS 115 BEGINNING GUITAR (2)  
See MUSI 160 Beginning Guitar

MUS 116 CONCERT BAND (1) R  
See MUSI 114 Band: UMW Concert Band

MUS 117 JAZZ ENSEMBLE (1) R  
See MUSI 131 Jazz Ensemble

MUS 131 MUSIC THEORY I (2)  
See MUSI 107 Music Theory I & Aural Perception

MUS 132 MUSIC THEORY II (2)  
See MUSI 109 Music Theory II & Aural Perception

MUS 141 APPLIED MUSICIANSHIP I (2)  
See MUSI 107 Music Theory I & Aural Perception

MUS 142 APPLIED MUSICIANSHIP II (2)  
See MUSI 109 Music Theory II & Aural Perception

MUS 143 HISTORY OF ROCK & ROLL (4)  
This course presents the roots, components, and development of Rock & Roll. This course will also focus upon the significant performing artists and groups from historic eras and explore sociological, economic, and cultural factors that shaped the Rock & Roll art form. This course includes lecture, audio/visual, and live performances. Activities include research projects/presentations. (fall/even-numbered years)

MUS 153 PIANO (V 1-2) R  
See MUSI 195 Applied Music I

MUS 162 VOICE IN CLASS (4)  
See MUSI 152 Voice in Class

MUS 163 VOICE (V 1-2) R  
See MUSI 150 Beginning Voice

MUS 165 VOCAL ENSEMBLE (1) R  
See MUSI 147 Choral Ensemble: UMW

MUS 187 PERFORMANCE SEMINAR (1) R-8 credits maximum  
See MUSI 187 Performance Study

MUS 202 INTRODUCTION TO MUSIC LITERATURE (4) (CD)  
See MUSI 202 Introduction to Music Literature

MUS 209 STRING METHODS (1)  
A laboratory-oriented course in which students develop elementary level performance skills on orchestral stringed instruments and demonstrate appropriate pedagogical techniques for teaching stringed instruments in various venues including the public schools. Prereq: c/i. (fall/even-numbered years)

MUS 212 WOODWIND METHODS (1)  
See MUSE 133 Techniques: Woodwinds

MUS 213 BRASS METHODS (1)  
A laboratory-oriented course in which students develop elementary level performance skills on the basic brass instruments and demonstrate appropriate pedagogical techniques for teaching brass instruments in various venues including the public schools. Prereq: c/i. (spring/odd-numbered years)

MUS 214 PERCUSSION METHODS (1)  
See MUSE 134 Techniques: Percussion

MUS 219 DIRECTED STUDY (V 1-5)  
Selected topics under faculty supervision. Prereq: c/i, c/pc, and c/vc. (fall/spring)

MUS 220 MUSIC THEATRE PRACTICUM (1)  
Study of musical theatre and operetta literature suitable for school use as well as procedures for school production; experience in acting and assisting with the technical duties of music productions. Offered only in conjunction with musical stage productions. Prereq: c/i.

MUS 233 MUSIC THEORY & EAR TRAINING III (4)  
Continuation of MUS 132/142 (MUSI 109) with emphasis on more complex harmonic progressions and formal analysis. Students will continue to develop musical reading and writing skills through sight-singing, diction, and keyboarding, as in Applied Musicianship. Prereq: MUS 132/MUS 142 (MUSI 109), or c/i. (fall/odd-numbered years)

MUS 290 INDEPENDENT STUDY (V 1-4)  
See MUSI 292 Independent Study

MUS 313 INSTRUMENTAL ENSEMBLE (1) R  
Music for different combinations of instruments to enrich the experience of qualified performers. Prereq: c/i. (fall/spring)

MUS 314 ORCHESTRAL INSTRUMENTS (V 1-2) R  
Private lessons on orchestral wind, percussion, or stringed instruments. Prereq: c/i. (fall/spring)
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Prerequisites/Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 316</td>
<td>CONCERT BAND (1) R</td>
<td>See MUSI 314 Band III: UMW Concert Band</td>
</tr>
<tr>
<td>MUS 317</td>
<td>JAZZ ENSEMBLE (1) R</td>
<td>See MUSI 331 Jazz Ensemble II: UMW</td>
</tr>
<tr>
<td>MUS 351</td>
<td>METHODS &amp; MATERIALS IN MUSIC (3)</td>
<td>See MUSE 497 Methods: Secondary Music Programs</td>
</tr>
<tr>
<td>MUS 353</td>
<td>PIANO (V 1-2) R</td>
<td>See MUSI 395 Applied Music III</td>
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<td>MUS 363</td>
<td>VOICE (V 1-2) R</td>
<td>See MUSI 363 Voice</td>
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<tr>
<td>MUS 365</td>
<td>VOCAL ENSEMBLE (1) R</td>
<td>See MUSI 312 Choir III: UMW</td>
</tr>
<tr>
<td>MUS 372</td>
<td>CONDUCTING (3)</td>
<td>Students will develop knowledge and skills to conduct instrumental and choral ensembles in public schools and in other amateur or professional settings. Score reading, score analysis, and rehearsal techniques will be refined to enhance accurate and expressive music performance. Prereq: MUS 132, or c/i. (fall/odd-numbered years)</td>
</tr>
<tr>
<td>MUS 374</td>
<td>ARRANGING (4)</td>
<td>Students will study instrument, voice, and ensemble characteristics, traditional and technological notation, and music vocabulary. In addition, students will develop listening, score study, transcribing, arranging, orchestrating, and composing skills for instrumental and vocal solos and ensembles. Prereq: MUS 132.</td>
</tr>
<tr>
<td>MUS 378</td>
<td>SECONDARY SCHOOL MUSIC TEACHING PRACTICUM (1) R</td>
<td>Opportunities to observe, teach, and/or conduct research in conjunction with secondary school music programs. (spring/odd-numbered years)</td>
</tr>
<tr>
<td>MUS 387</td>
<td>PERFORMANCE SEMINAR (1) R-8 credits maximum</td>
<td>See MUSI 387 Performance Study</td>
</tr>
</tbody>
</table>

Note: New OCHE Common Course Numbering system rubrics and courses are displayed in italics throughout this Catalog.

**MUSIC: EDUCATION (MUSE)**

(New OCHE rubric effective Fall 2010)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Pre-Fall 2010 UMW course:</th>
<th>Prerequisites/Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSE 133</td>
<td>TECHNIQUES: WOODWINDS (I)</td>
<td>MUS 212 Woodwind Methods</td>
<td>A laboratory-oriented course in which students develop elementary level performance skills on the basic woodwind instruments and demonstrate appropriate pedagogical techniques for teaching woodwind instruments in various venues including the public schools. Prereq: c/i. (spring/even-numbered years)</td>
</tr>
<tr>
<td>MUSE 134</td>
<td>TECHNIQUES: PERCUSSION (I)</td>
<td>MUS 214 Percussion Methods</td>
<td>A laboratory-oriented course in which students develop elementary level performance skills on the standard percussion instruments and demonstrate appropriate pedagogical techniques for teaching percussion in various venues including the public schools. Prereq: c/i. (fall/odd-numbered years)</td>
</tr>
<tr>
<td>MUSE 497</td>
<td>METHODS: SECONDARY MUSIC PROGRAMS (4)</td>
<td>MUS 351 Methods &amp; Materials in Music, and MUS 378 Secondary School Music Teaching Practicum</td>
<td>This course is designed to present the philosophies, history, and methods of teaching and managing music education at the secondary level. Students will gain experience in planning, evaluating, and performing tasks required for successful implementation of a secondary music education program. Will provide opportunities to observe, teach, and/or conduct research in conjunction with secondary school music programs. Prereq: MUS 132 (MUSI 109) and TEP. (spring/odd-numbered years)</td>
</tr>
</tbody>
</table>
MUSI 103 FUNDAMENTALS OF MUSICAL CREATION (4)
Pre-Fall 2010 UMW course: MUSI 103 Music Fundamentals/Piano
Students are introduced to the universal elements of music (such as rhythm, melody, harmony) and Western notation of music. They demonstrate basic music literacy skills through creative work such as small compositions, singing, playing instruments, and through listening activities and exams. They study some history of music and learn about a variety of forms, functions, styles, instruments, composers, and performers from many cultures, including traditional and contemporary music of Montana Native Americans. Students examine global issues such as censorship, the commercialization of music, and the education and training of musicians. (fall/spring)

MUSI 107 MUSIC THEORY I & AURAL PERCEPTION (4)
Pre-Fall 2010 UMW courses: MUSI 131 Music Theory I, and MUSI 141 Applied Music Theory I
This course will serve as an introduction to functional harmony and analysis that includes part-writing in two, three, and four parts. Students will develop aural skills through sight-singing, diction, and keyboard harmony. Student composition projects and presentations will synthesize course material and promote knowledge and understanding of subject. Prereq: MUSI 101 (MUSI 103), or c/i. (fall/even-numbered years)

MUSI 109 MUSIC THEORY II & AURAL PERCEPTION (4)
Pre-Fall 2010 UMW courses: MUSI 132 Music Theory II, and MUSI 142 Applied Music Theory II
Continuation of study from Music Theory I & Aural Perception, with emphasis on more complex harmonic progressions, sight-singing, diction, and keyboard harmony. Student composition projects and presentations will synthesize course material and promote knowledge and understanding of subject. Prereq: MUSI 131 (MUSI 107), or c/i. (spring/odd-numbered years)

MUSI 114 BAND: UMW CONCERT BAND (1) R
Pre-Fall 2010 UMW course: MUSI 116 Concert Band
Students will experience instrumental ensemble participation at the highest level possible, increase reading and playing skills, prepare and perform a minimum of two concerts per semester, and research a wide variety of styles and genres in band literature. At this level, students will provide oral and written presentation of research findings.

MUSI 131 JAZZ ENSEMBLE I: UMW (1) R
Pre-Fall 2010 UMW course: MUSI 117 Jazz Ensemble
Prereq: c/i.

MUSI 147 CHORAL ENSEMBLE: UMW (1) R
Pre-Fall 2010 UMW course: MUSI 165 Vocal Ensemble
Students and community members will experience choir participation at the highest level possible, increase music reading and singing skills, prepare and perform one to two concerts per semester, and research a wide variety of styles and genres in choral literature. Students will provide oral and written presentations of research findings. Prereq: c/i.

MUSI 150 BEGINNING VOICE (V 1-2) R
Pre-Fall 2010 UMW course: MUSI 163 Voice
Private lessons for advanced students only. Beginning students should enroll in a vocal group. Prereq: c/i. (fall/spring)

MUSI 152 VOICE IN CLASS (4)
Pre-Fall 2010 UMW course: MUSI 162 Voice in Class
This course will introduce students to fundamentals of tone production; breathing, resonance, vowel formation, and posture. This course will also focus upon vocal techniques and skills relating to general music classes and choral ensembles, such as producing crescendo, diminuendo, legato, flexibility, velocity, and piano techniques relevant to choral rehearsals. Additionally, students will research, report, and write in the areas of music history and music of diverse cultures. (spring/even-numbered years)

MUSI 160 BEGINNING GUITAR (2)
Pre-Fall 2010 UMW course: MUSI 115 Beginning Guitar
Basic techniques of guitar; development of functional skills for performance and instruction. Prereq: c/i. (spring/even-numbered years)

MUSI 187 PERFORMANCE STUDY (1) R-8 credits maximum
Pre-Fall 2010 UMW course: MUSI 187 Performance Seminar
Signature UMW vocal ensemble performing for both on and off-campus special events and concerts. Intermediate to advanced singers selected by audition. May be repeated at upper division level for up to a total of 8 credits. Prereq: Audition and c/i. (fall/spring)

MUSI 195 APPLIED MUSIC I (V 1-2) R
Pre-Fall 2010 UMW course: MUSI 153 Piano
Private lessons. Prereq: c/i.

MUSI 202 INTRODUCTION TO MUSIC LITERATURE (4) (CD)
Pre-Fall 2010 UMW course: MUSI 202 Introduction to Music Literature
This is a music survey course that introduces students to the development and uses of music from antiquity to the present. The content includes both Western and non-Western music. Upon successful completion of the course, students will demonstrate through examination, written, and oral presentation knowledge and understanding of music of various styles, historical periods, composers, and performers. A strong listening component is included that embraces recorded and live music. Required for Secondary Education Music Minor and BA: Music Related Area. Note: This class may also be required in other BA Related Areas. (fall/odd-numbered years)

MUSI 292 INDEPENDENT STUDY (V 1-4)
Pre-Fall 2010 UMW course: MUSI 290 Independent Study
Directed research or study on an individual basis. Prereq: c/i, c/pc, and c/vc. (fall/spring)

MUSI 312 CHOIR III: UMW (1) R
Pre-Fall 2010 UMW course: MUSI 365 Vocal Ensemble
Students and community members will experience choir participation at the highest level possible, increase music reading and singing skills, prepare and perform one to two concerts per semester, and research a wide variety of styles and genres in choral literature. Students will provide oral and written presentations of research findings. Prereq: c/i.

MUSI 314 BAND III: UMW CONCERT BAND (1) R
Pre-Fall 2010 UMW course: MUSI 316 Concert Band
Students will experience instrumental ensemble participation at the highest level possible, increase reading and playing skills, prepare and perform a minimum of two concerts per semester, and research a wide variety of styles and genres in band literature. At this level, students will present findings orally and in written form and will also prepare program notes and prepare community information and education announcements.

MUSI 331 JAZZ ENSEMBLE II: UMW (1) R
Pre-Fall 2010 UMW course: MUSI 317 Jazz Ensemble
Prereq: c/i.
MUSI 363 VOICE (V 1-2) R
Pre-Fall 2010 UMW course: MUSI 363 Voice
Private lessons for advanced students only. Prereq: c/i.

MUSI 387 PERFORMANCE STUDY (1) R-8 credits maximum
Pre-Fall 2010 UMW course: MUSI 387 Performance Seminar
Signature UMW vocal ensemble performing for both on and off-campus special events and concerts. Intermediate to advanced singers selected by audition. May be repeated at upper division level for up to a total of 8 credits. Prereq: Audition and c/i. (fall/spring)

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PHILOSOPHY (PHIL)
[For OCHE equivalent courses effective Fall 2010, see PHILOSOPHY (PHIL)]

PHIL 100 INTRODUCTION TO PHILOSOPHY (4) (CD)
See PHIL 101 Introduction to Philosophy: Reason & Reality

PHIL/ENVS 201 HISTORY & PHILOSOPHY OF SCIENCE (4)
See PHIL 241 History & Philosophy of Science

PHIL 219 DIRECTED STUDY (V 1-4)
Selected topics under faculty supervision, with emphasis on experiential learning. Prereq: c/i, c/pc, and c/vc. (on demand)

PHIL 290 INDEPENDENT STUDY (V 1-4)
See PHIL 292 Independent Study

PHIL 400 COOPERATIVE EDUCATION/INTERNSHIP (V 1-15)
See PHIL 498 Internship/Cooperative Education/Omnibus

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PHILOSOPHY (PHIL)
(New OCHE rubric effective Fall 2010)

PHIL 101 INTRODUCTION TO PHILOSOPHY: REASON & REALITY (4) (CD)
Pre-Fall 2010 UMW course: PHIL 100 Introduction to Philosophy
A comprehensive survey of the history, methodology, problems, and major theories of Western philosophy. Comparisons will be made between this tradition and non-Western philosophy, with special emphasis on the philosophies of indigenous peoples. Students will demonstrate understanding of course content through in- and out-of-class writing assignments. Lecture and group discussions. (fall on campus; spring via internet)

PHIL 241 HISTORY & PHILOSOPHY OF SCIENCE (4)
Pre-Fall 2010 UMW course: PHIL/ENVS 201 History & Philosophy of Science
This course will explore the history of science from its classical beginnings to modern times. The development of the process and meaning of science will be emphasized. In particular, the philosophical basis of science as a way of knowing and understanding the world will be compared to other major areas of philosophy. Students will be engaged in group discussions and will make group and individual presentations. Students will also write several short papers and a research paper. Includes guest lecturers from the HPSS Department. (spring)

PHIL 292 INDEPENDENT STUDY (V 1-4)
Pre-Fall 2010 UMW course: PHIL 290 Independent Study
Directed research or study, with emphasis on experiential learning. Prereq: PHIL 101 (PHIL 101), c/i, c/pc, and c/vc. (on demand)

PHIL 294 SEMINAR/WORKSHOP (V 1-4)
Pre-Fall 2010 UMW course: PHIL 294 Seminar/Workshop
Selected topics of interest. Prereq: c/i. (on demand)

PHIL 409 SEMINAR (4)
See PHIL 294 Seminar/Workshop

PHIL 419 DIRECTED STUDY (V 1-4)
Selected topics under faculty supervision, with emphasis on experiential learning. Prereq: c/i, c/pc, and c/vc. (on demand)

PHIL 490 INDEPENDENT STUDY (V 1-4)
See PHIL 492 Independent Study

PHIL 498 SENIOR PROJECT/THESIS (V 1-15)
See PHIL 499 Senior Project/Thesis

PHIL 499 SENIOR PROJECT/THESIS (V 1-15)
Pre-Fall 2010 UMW course: PHIL 498 Senior Project/Thesis
This course is intended as a culminating experience for the social science major. Working with a faculty advisor, the student will generate a product that demonstrates a competent, independent application of basic humanities research skills. Prereq: PHIL 101 (PHIL 101), c/i, c/pc, and c/vc. (on demand)
PHYSICS (PHSX)
(New OCHE rubric effective Fall 2010)

A prerequisite for any course with a PHSX rubric is documented mathematical ability equivalent to MATH 007 Algebra/M 095 Intermediate Algebra. Ability can be demonstrated by appropriate college credit, ACT/SAT Math score, or UMW Math Placement Exam score.

PHSX 103 OUR PHYSICAL WORLD (4)
Pre-Fall 2010 UMW course: PHYS 101 Introduction to Physics
Elementary principles of mechanics, thermodynamics, electricity, and magnetism, with application to chemistry, earth, and life sciences. Lab included. $5 Course Fee. Prereq: equivalent of MATH 007 (M 095) or higher.

PHSX 220 PHYSICS I (4)
Pre-Fall 2010 UMW course: PHYS 233 General Physics
A calculus-based introduction to classical mechanics including fluid and wave mechanics. Lab included. $5 Course Fee. Prereq: MATH 201 (M 171). (fall)

PHSX 222 PHYSICS II (4)
Pre-Fall 2010 UMW course: PHYS 234 General Physics
Electricity and magnetism. Lab included. $5 Course Fee. Prereq: MATH 201 (M 171). (spring)

PHSX 224 PHYSICS III (4)
Pre-Fall 2010 UMW course: PHYS 235 General Physics
A calculus-based course in thermal and modern physics including special relativity, an introduction to quantum physics with applications to atomic and molecular physics, and nuclear structure. During the semester, students will do some of the experiments that were critical to the development of modern physics. Prereq: MATH 201 (M 171).

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PHYSICS (PHYS)
[For OCHE equivalent courses effective Fall 2010, see appropriate rubric & course listed under individual courses]

A prerequisite for any course with a PHYS rubric is documented mathematical ability equivalent to MATH 007 Algebra/M 095 Intermediate Algebra. Ability can be demonstrated by appropriate college credit, ACT/SAT Math score, or UMW Math Placement Exam score.

PHYS 101 INTRODUCTION TO PHYSICS (4)
See PHSX 103 Our Physical World

PHYS 219 DIRECTED STUDY (V 1-5)
Selected topics under faculty supervision. Prereq: c/i, c/pc, and c/vc. (fall/spring)

PHYS 233 GENERAL PHYSICS (4)
See PHSX 220 Physics I

PHYS 234 GENERAL PHYSICS (4)
See PHSX 222 Physics II

PHYS 235 GENERAL PHYSICS III (4)
See PHSX 224 Physics III

PHYS 239 PHYSICAL METEOROLOGY (4)
See PHSX 249 Physical Meteorology

PHYS 240 ASTRONOMY (4)
See ASTR 110 Astronomy

PHYS 290 INDEPENDENT STUDY (V 1-4)
Directed research or study on an individual basis. Prereq: c/i, c/pc, and c/vc. (fall/spring)

PHYS 340 TOPICS IN MODERN PHYSICS: MECHANICS (4)
Introduction to nonlinear mechanics and chaos with applications to population dynamics. Prereq: PHYS 235 (PHSX 224). (fall)

PHYS 400 COOPERATIVE EDUCATION/INTERNSHIP (V 1-15)
Incorporation of an appropriate work experience into the student’s academic preparation. Prereq: Senior standing, c/i, c/pc, and c/vc. (fall/spring)

PHYS 401 TOPICS IN MODERN PHYSICS: INTRODUCTION TO QUANTUM MECHANICS (4)
The development of wave mechanics and the solution of the Schrodinger equation with applications to atoms and molecules. Prereq: PHYS 235 (PHSX 224). (spring)

PHYS 419 DIRECTED STUDY (V 1-5)
Selected topics under faculty supervision. Prereq: c/i, c/pc, and c/vc. (on demand)

PHYS 490 INDEPENDENT STUDY (V 1-4)
Directed research or study on an individual basis. Prereq: c/i, c/pc, and c/vc. (fall/spring)

PHYS 498 SENIOR PROJECT/THESIS (V 1-15)
An individual project or thesis closely associated with the student’s academic program and career goals. Student works with one selected faculty member. Prereq: Senior standing, c/i, c/pc, and c/vc. (fall/spring)
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POLITICAL SCIENCE (POLS)

[For OCHE equivalent courses effective Fall 2009, see appropriate rubric & course listed under individual courses]

POLS 121 AMERICAN NATIONAL & STATE GOVERNMENT (4) (CD)
See ISSS 121 American National & State Government

POLS/ECON/GEOG 201 THE WORLD ECONOMY (4)
See ISSS 201 The World Economy

POLS 219 DIRECTED STUDY (V 1-4)
Selected topics under faculty supervision, with emphasis on experiential learning. Prereq: c/i and c/vc. (on demand)

POLS 220 INTRODUCTION TO RESEARCH METHODS (4)
See ISSS 220 Introduction to Research Methods

POLS/ANTH/HIST/SOC 221 QUANTITATIVE METHODS FOR SOCIAL SCIENCE (4)
See ISSS 221 Quantitative Research Methods for Social Science

POLS/ANTH/HIST/PSY/SOC 222 QUALITATIVE METHODS FOR SOCIAL SCIENCE (4)
See ISSS 222 Qualitative Research Methods for Social Science

POLS 250 POLITICAL THEORY (4) (CD)
See PSCI 250 Introduction to Political Theory

POLS 290 INDEPENDENT STUDY (V 1-4)
See PSCI 292 Independent Study

POLS 313 INTERNATIONAL RELATIONS & AMERICAN DIPLOMACY (4)
See PSCI 313 International Relations Theory

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POLITICAL SCIENCE (PSCI)

[New OCHE rubric effective Fall 2009]

PSCI 250 INTRODUCTION TO POLITICAL THEORY (4) (CD)
Pre-Fall 2009 UMW course: POLS 250 Political Theory
Analysis of the various attempts within Western thought (from the ancient world to the present) to explain, instruct, and justify the distribution of political power in society. Emphasis is placed upon those theories whose primary concern is to define the nature of political knowledge, ethical subjectivity, and a just society. Critiques of this tradition from both Western and non-Western sources will be explored, with special emphasis given to the justice claims of indigenous peoples. Students will demonstrate understanding of course content through in- and out-of-class writing assignments. Lecture and group discussion. (spring)

PSCI 290 UNDERGRADUATE RESEARCH (V 2-8)
Selected topics under faculty supervision. Prereq: c/i, c/pc, and c/vc. (on demand)

PSCI 292 INDEPENDENT STUDY (V 1-4)
Pre-Fall 2009 UMW course: POLS 290 Independent Study
Directed research or study, with emphasis on experiential learning. Prereq: c/i, c/pc, and c/vc. (on demand)

PSCI 294 SEMINAR/WORKSHOP (V 1-4)
Selected topics of interest. Prereq: c/i. (spring)

PSCI 331 INTERNATIONAL RELATIONS THEORY (4)
Pre-Fall 2009 UMW course: POLS 331 International Relations & American Diplomacy
An in-depth examination of the world political system, theories of international relations, and American foreign policy from independence to the present. Particular emphasis will be placed on America’s role as a hegemon in the 21st century. Students will be evaluated based on class participation and written assignments requiring some individual research. Seminar. $15 Course Fee. Prereq: ANTH/HIST/POLS/PSY/SOC 220, or ANTH/HIST/POLS/PSY/SOC 221, or ANTH/HIST/POLS/PSY/SOC 222, or ISSS 222; or ci. (Block 2/fall 2010; Block 1 fall/even-numbered years beginning 2012)

PSCI 347 U.S. CONGRESS (4)
Pre-Fall 2009 UMW course: POLS 360 Legislative & Presidential Politics
This course provides an in-depth look at how Congress really works and at the power and structure of the Executive branch. This will include discussion regarding how elections, media, lobbyists, and personal and professional relationships influence legislation and Congressional powers, as well as Congress’s relationship with the President, and the President’s ability to enact his agenda. Students will be evaluated on the basis of written assignments, examinations, and class
discussion. Lecture and discussion. Prereq: POLS 121 (ISSS 121). (on demand)

PSCI 471 AMERICAN CONSTITUTIONAL LAW (4)
Pre-Fall 2009 UMW course: POLS 470 Constitutional Law
Case studies of judicial policy-making by interpretation of the United States Constitution. Topics may include federalism and the separation of powers, civil rights and liberties, and/or comparison of non-U.S. legal systems. Students interested in pursuing further study or careers in law or law enforcement may be particularly interested in this course; however, it is designed to be useful to all students and citizens. Students will be asked to write case briefs and opinions, and make oral presentations of both their own and historical figures’ constitutional thinking. Prereq: POLS 250 (PSCI 250), and either ANTH/HIST/POLS/PSY/SOC 220 or ANTH/HIST/POLS/PSY/SOC 221, or ANTH/HIST/POLS/PSY/SOC 222, or ISSS 222; or c/i. (Block 3 fall/odd-numbered years)

PSCI 490 UNDERGRADUATE RESEARCH (V 2-8)
Selected topics under faculty supervision. Prereq: c/i, c/pc, and c/vc. (on demand)

PSCI 492 INDEPENDENT STUDY (V 1-4)
Pre-Fall 2009 UMW course: POLS 490 Independent Study
Advanced directed research or study, with emphasis on experiential learning. Students are expected to critically evaluate, analyze, and synthesize selected topics through authorship of an extensive course paper requiring independent research skills. Prereq: ANTH/HIST/POLS/PSY/SOC 220, or ANTH/HIST/POLS/PSY/SOC 221, or ANTH/HIST/POLS/PSY/SOC/SOC 222, or ISSS 222; or c/i. (Block 6 spring/odd-numbered years; Block 7 spring/even-numbered years)

PSCI 494 SEMINAR/WORKSHOP (V 1-4)
Pre-Fall 2009 UMW course: POLS 409 Seminar
Selected topics of interest. Prereq: Junior standing and c/i. (Block 6 spring/odd-numbered years; Block 7 spring/even-numbered years)

PSCI 498 INTERNSHIP/COOPERATIVE EDUCATION/OMNIBUS (V 1-15)
Pre-Fall 2009 UMW course: POLS 400 Coop Ed/Internship
This option is intended to provide students with an opportunity to incorporate an appropriate extended field experience into their academic program. Field placement options to include all political settings. Prereq: ANTH/HIST/POLS/PSY/SOC 220, or ANTH/HIST/POLS/PSY/SOC/SOC 221, or ANTH/HIST/POLS/PSY/SOC/SOC 222, or ISSS 222; and c/i, c/pc, and c/vc. (on demand)

PSCI 499 SENIOR PROJECT/THESIS (V 1-15)
Pre-Fall 2009 UMW course: POLS 498 Senior Project/Thesis
This course is intended as a culminating experience for the social science degree. Working with a faculty advisor, the student will generate a product that demonstrates a competent, independent application of basic political research. Prereq: ANTH/HIST/POLS/PSY/SOC 220, or ANTH/HIST/POLS/PSY/SOC/SOC 221, or ANTH/HIST/POLS/PSY/SOC/SOC 222, or ISSS 222; and c/i, c/pc, and c/vc. (on demand)

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PSYCHOLOGY (PSY)
[For OCHE equivalent courses effective Fall 2009, see appropriate rubric & course listed under individual courses]

PSY 100 GENERAL PSYCHOLOGY (4) (CD)
See PSYX 100 Introduction to Psychology

PSY 201 INTRODUCTION TO COGNITION (4) (CD)
See PSYX 280 Fundamentals of Memory & Cognition

PSY 219 DIRECTED STUDY (V 1-4)
Selected topics under faculty supervision, with emphasis on experiential learning. Prereq: c/i, c/pc, and c/vc. (on demand)

PSY 220 INTRODUCTION TO SOCIAL SCIENCE RESEARCH METHODS (4)
See PSYX 203 Introduction to Social Science Research Methods

PSY 221 QUANTITATIVE METHODS FOR SOCIAL SCIENCE (4)
See PSYX 203 Introduction to Social Science Research Methods

PSY 222 QUALITATIVE METHODS FOR SOCIAL SCIENCE (4)
See ISSS 222 Qualitative Research Methods for Social Science

PSY 265 INTRODUCTION TO MOTIVATION-THEORY & PRACTICE (4) (CD)
See PSYX 366 Motivation-Theory & Practice

PSY 275 DEVELOPMENTAL PSYCHOLOGY (4) (CD)
See PSYX 230 Developmental Psychology

PSY 290 INDEPENDENT STUDY (V 1-4)
See PSYX 292 Independent Study

PSY 300 QUANTITATIVE METHODS FOR THE BEHAVIORAL SCIENCES (4)
See PSYX 322 Quantitative Research Methods for the Behavioral Sciences

PSY 360 LEARNING & MEMORY (4)
See PSYX 270 Fundamental Psychology of Learning

PSY 400 COOPERATIVE EDUCATION/INTERNSHIP (V 1-15)
See PSYX 498 Internship/Cooperative Education/Omnibus

PSY 409 SEMINAR (4)
See PSYX 494 Seminar/Workshop

PSY 419 DIRECTED STUDY (V 1-4)
Selected topics under faculty supervision, with emphasis on experiential learning. Prereq: PSYX 322, c/i, c/pc, and c/vc. (on demand)

PSY 437 PSYCHOLOGY OF PERSONALITY (4)
See PSYX 385 Psychology of Personality

PSY 438 ABNORMAL PSYCHOLOGY (4)
See PSYX 440 Abnormal Psychology & Research

PSY 452 SOCIAL PSYCHOLOGY & GROUP DYNAMICS (4)
See PSYX 360 Social Psychology

PSY 490 INDEPENDENT STUDY (V 1-4)
See PSYX 492 Independent Study

PSY 498 SENIOR PROJECT/THESIS (V 1-15)
See PSYX 499 Senior Project/Thesis

Note: New OCHE Common Course Numbering system rubrics and courses are displayed in italics throughout this Catalog.
PSYX 100 INTRODUCTION TO PSYCHOLOGY (4)
Pre-Fall 2009 UMW course: PSY 100 General Psychology
A survey of the history, methodology, and major theories of psychology. Topics include the influence of biology, individual experience, and culture on human consciousness. Students are expected to demonstrate understanding and comprehension of course content through course examinations and out-of-class writing assignments. Lecture and small group discussions. (fall/spring; online: fall)

PSYX 203 INTRODUCTION TO SOCIAL SCIENCE RESEARCH METHODS (4)
Pre-Fall 2009 UMW courses: PSY 220 Introduction to Social Science Research Methods, and PSY 221 Quantitative Methods for Social Science
A survey of research methods and tools used by behavioral scientists. Students are expected to demonstrate understanding and comprehension of course content through course examinations, out-of-class writing assignments, and the critical application of course content to a student-selected problem. Lecture, small group discussions, and problem-solving. (on demand)

PSYX 230 DEVELOPMENTAL PSYCHOLOGY (4) (CD)
Pre-Fall 2009 UMW course: PSY 275 Developmental Psychology
This course is designed as an introduction to the research methodologies and major theories of developmental psychology. Physical, cognitive, social, emotional, and personality development are explored from conception to death within the context of socio-cultural background. Students are expected to demonstrate understanding and comprehension of content through course examinations and out-of-class writing assignments. (Block 3 fall/odd-numbered years)

PSYX 252 FUNDAMENTALS OF COMPARATIVE PSYCHOLOGY (4) (CD)
Pre-Fall 2009 UMW course: PSY 203 Comparative Psychology
This course will investigate animal behavior from the viewpoint of its role in the natural life of the individual and the species. Specific topics include associative learning, constraints on learning, methods for studying the cognitive abilities of animals, levels of cognitive representation, ecological influences on cognition, and evidence of consciousness in animals. Students are expected to demonstrate understanding and comprehension of course content through course examinations and out-of-class writing assignments. (on demand)

PSYX 270 FUNDAMENTAL PSYCHOLOGY OF LEARNING (4)
Pre-Fall 2009 UMW course: PSY 360 Learning & Memory
A survey of the basic theories and research regarding the nature of the human acquisition and use of knowledge. Specific topics include learning, memory, thinking, and metacognition. Students are expected to demonstrate understanding and comprehension of course content through course examinations and out-of-class writing assignments. (on demand)

PSYX 280 FUNDAMENTALS OF MEMORY & COGNITION (4) (CD)
Pre-Fall 2009 UMW course: PSY 201 Introduction to Cognition
This course is designed as an introduction to the basic research methods and general theories of cognitive psychology by examining how people acquire information both explicitly and implicitly from the environment, how that information is represented and processed internally, and how it influences everyday thinking, communication, and problem-solving. Specific emphasis will be placed on how socio-cultural context impacts perception and internal ideation. Students are expected to demonstrate understanding and comprehension of course content through course examinations and out-of-class writing assignments. (Block 3 fall/even-numbered years)

PSYX 290 UNDERGRADUATE RESEARCH (V 2-8)
A survey of the history, methodology, and major theories of psychology. Topics include the influence of biology, individual experience, and culture on human consciousness. Students are expected to demonstrate understanding and comprehension of course content through course examinations and out-of-class writing assignments. Lecture and small group discussions. (fall/spring; online: fall)

PSYX 292 INDEPENDENT STUDY (V 1-4)
Pre-Fall 2009 UMW course: PSY 290 Independent Study
Directed research or study, with emphasis on experiential learning. Prereq: c/i, c/pc, and c/vc. (on demand)

PSYX 294 SEMINAR/WORKSHOP (V 1-4)
Selected topics of interest. (Block 4/Fall 2010; Block 8 spring/odd-numbered years beginning 2012)

PSYX 322 QUANTITATIVE RESEARCH METHODS FOR THE BEHAVIORAL SCIENCES (4)
Pre-Fall 2009 UMW course: PSY 300 Quantitative Research Methods for the Behavioral Sciences
This course is designed to help students become competent, critical consumers of social science quantitative research. The students will be expected to demonstrate the abilities necessary to critically design, implement, and analyze quantitative research. Prereq: General Education Behavioral & Social Science requirement, 6 credits of lower division psychology coursework beyond PSYX 100, and BIO 233 (STAT 233); or c/i. (Block 1/Fall 2010; Block 4 fall/even-numbered years beginning 2012)

PSYX 360 SOCIAL PSYCHOLOGY (4)
Pre-Fall 2009 UMW course: PSY/SOC 452 Social Psychology
Social psychology will focus on the investigation of how the embedding context of cultural and group membership impact the typical individual. Prereq: PSYX 322, or c/i. (Block 5 spring/odd-numbered years)

PSYX 366 MOTIVATION-THEORY & PRACTICE (4) (CD)
Pre-Fall 2009 UMW course: PSY 265 Introduction to Motivation-Theory & Practice
This course introduces the fundamental theories of motivation, how those theories are applied to various socio-cultural environments, and the impact on both individuals and social groups. Specific topics include motives and cultural models, motivation and institutional settings, and motivation and optimal experiences. Students are expected to demonstrate understanding and comprehension of course content through course examinations and out-of-class writing assignments. Prereq: PSYX 322, or c/i. (on demand)

PSYX 385 PSYCHOLOGY OF PERSONALITY (4)
Pre-Fall 2009 UMW course: PSY 437 Psychology of Personality
This course is designed as an introduction to the basic history, research methods, and general theories of personality psychology. Topics include the impact of biological, social, and experiential on personality development. Students are expected to demonstrate understanding and comprehension of course content through course examinations and out-of-class writing assignments. Prereq: PSYX 322, or c/i. (Block 5 spring/odd-numbered years)

PSYX 440 ABNORMAL PSYCHOLOGY & RESEARCH (4)
Pre-Fall 2009 UMW course: PSY 438 Abnormal Psychology
This course explores the symptoms and causes of various types of psychological disorders. Topics will be explored from psychodynamic, cognitive, social, and behavioral perspectives. Students are expected to demonstrate understanding and comprehension of course content through course examinations and out-of-class writing assignments. Prereq: PSYX 322, or c/i. (Block 8 spring/odd-numbered years)
<table>
<thead>
<tr>
<th>Course Code</th>
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<th>Notes</th>
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<tbody>
<tr>
<td>PSYX 490</td>
<td>UNDERGRADUATE RESEARCH (V 2-8)</td>
<td>Selected topics under faculty supervision. Prereq: PSYX 322, c/i, c/pc, and c/vc. (on demand)</td>
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<tr>
<td>PSYX 492</td>
<td>INDEPENDENT STUDY (V 1-4)</td>
<td>Pre-Fall 2009 UMW course: PSY 490 Independent Study Advanced directed research or study, with emphasis on experiential learning. Students are expected to critically evaluate, analyze, and synthesize selected topics through authorship of an extensive course paper requiring independent archival skills. Prereq: PSYX 322, c/i, c/pc, and c/vc. (on demand)</td>
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<td>PSYX 494</td>
<td>SEMINAR/WORKSHOP (V 1-4)</td>
<td>Pre-Fall 2009 UMW course: PSY 409 Seminar Selected topics of interest. Prereq: Junior standing. (Block 4/fall 2010; Block 8/even-numbered years beginning 2012)</td>
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Note: New OCHE Common Course Numbering system rubrics and courses are displayed in italics throughout this Catalog.

**SOCI 101 INTRODUCTION TO SOCIOLOGY (4) (CD)**
Pre-Fall 2009 UMW course: SOC 115 Introduction to Sociology
A comprehensive survey of the history, methodology, and major theories of sociology. Students will be able to demonstrate an understanding of course content through written critiques and directed examinations. Lecture and small group discussions. (fall)

**SOCI 201 SOCIAL PROBLEMS (4) (CD)**
Pre-Fall 2009 UMW course: SOC 203 Social Problems & Deviant Behavior
There will be discussions of the major social problems including but not limited to analysis of social causes and issues of deviant behavior and juvenile delinquency. This will include stigmatized behavior and conditions, including the causes, effects of this stigma. Domestic violence, juvenile delinquency, and the process of criminalization of certain behavior will be included. Students will demonstrate understanding and comprehension of course content through course examinations and out-of-class writing assignments. (Block 5 spring/even-numbered years)

**SOCI 290 UNDERGRADUATE RESEARCH (V 2-8)**
Selected topics under faculty supervision. Prereq: SOC 115 (SOCI 101), c/i, c/pc, and c/vc. (on demand)

**SOCI 292 INDEPENDENT STUDY (V 1-4)**
Directed research or study, with emphasis on experiential learning. Prereq: SOC 115 (SOCI 101), c/i, c/pc, and c/vc. (on demand)

**SOCI 294 SEMINAR/WORKSHOP (V 1-4)**
Selected topics of interest. Prereq: c/i. (on demand)

**SOCI 317 RESTORATIVE JUSTICE (4)**
Pre-Fall 2009 UMW course: SOC 310 Restorative Justice
This class is an overview of some of the directions in which the justice system is proceeding. Restorative Justice is an alternative approach to crime and alterations of any type. It focuses on positive, non-violent ways to arrive at just solutions to wrongdoing. As a culture, traditionally we have a winner-take-all approach to disputes, and a retributive/vengeful approach to crime. This class focuses on alternative ways to respond, for resolution for all victims. Students will participate in conflict resolution role-playing, and develop case studies on a particular aspect of restorative justice. Assessment will be based on class participation, case studies, formal presentations, and development of advocacy resources. Prereq: ANTH 105 or SOC 115 (SOCI 101), and either ANTH/HIST/POLS/PSY/SOC 220, or ANTH/HIST/POLS/PSY/SOC 221, or ANTH/HIST/POLS/PSY/SOC 222, or ISSS 222, and Junior/Senior standing; or c/i. (on demand)

**SOCI 332 SOCIOLOGY OF THE FAMILY (4)**
Pre-Fall 2009 UMW course: SOC 300 Sociology of the Family
Historical, cross-cultural, and analytical study of the family. Emphasis on ideology, social structures, and agency affecting family composition and roles. Students will participate in supervised research, and hands-on experience with family studies and family counseling. Students will be assessed based on class discussions and research projects. Prereq: SOC 115 (SOCI 101). (on demand)

**SOCI 360 MEDIATION (4)**
Pre-Fall 2009 UMW course: SOC 320 Mediation
Mediation is a way of resolving disputes between parties with an emphasis on the parties resolving the dispute in an empowering manner. The focus is on those involved coming to a resolution of the issue with the help of a mediator, and without a solution being imposed by an outside authority. The kinds of disputes can be civil, personal, criminal, and institutional, though not limited to these. Other examples would be: land use, foreign policy, labor/management, peer mediation in schools. Students will practice communication skills in dyads, participate in mediation role-playing, prepare and deliver oral presentations, and maintain a class journal. Assessment will be based on peer review, quality and content of presentations, and participation in class activities. (on demand)

**SOCI 490 UNDERGRADUATE RESEARCH (V 2-8)**
Selected topics under faculty supervision. Prereq: ANTH/HIST/POLS/PSY/SOC 220, or ANTH/HIST/POLS/PSY/SOC 221, or ANTH/HIST/POLS/PSY/SOC 222, or ISSS 222; and c/i, c/pc, and c/vc. (on demand)

**SOCI 492 INDEPENDENT STUDY (V 1-4)**
Pre-Fall 2009 UMW course: SOC 492 Independent Study
Advanced directed research or study, with emphasis on experiential learning. Students are expected to critically evaluate, analyze, and synthesize selected topics through authorship of an extensive course paper requiring independent archival skills. Prereq: SOC 115 (SOCI 101), and either ANTH/HIST/POLS/PSY/SOC 220, or ANTH/HIST/POLS/PSY/SOC 221, or ANTH/HIST/POLS/PSY/SOC 222, or ISSS 222; and c/i, c/pc, and c/vc. (on demand)

**SOCI 494 SEMINAR/WORKSHOP (V 1-4)**
Pre-Fall 2009 UMW course: SOC 409 Seminar
Selected topics of interest. Prereq: Junior standing and c/i. (Block 7 spring/odd-numbered years)

**SOCI 498 INTERNSHIP/COOPERATIVE EDUCATION/OMNIBUS (V 1-15)**
Pre-Fall 2009 UMW course: SOC 400 Coop Ed/Internship
This option is intended to provide students with an opportunity to incorporate an appropriate extended field experience into their academic program. Field placement options to include all facets of the helping professions. Prereq: SOC 115 (SOCI 101), and either ANTH/HIST/POLS/PSY/SOC 220, or ANTH/HIST/POLS/PSY/SOC 221, or ANTH/HIST/POLS/PSY/SOC 222, or ISSS 222; and c/i, c/pc, and c/vc. (on demand)

**SOCI 499 SENIOR PROJECT/THESIS (V 1-15)**
Pre-Fall 2009 UMW course: SOC 498 Senior Project/Thesis
This course is intended as a culminating experience for the social science degree. Working with a faculty advisor, the student will generate a product that demonstrates a competent, independent application of basic sociological research. Prereq: SOC 115 (SOCI 101), and either ANTH/HIST/POLS/PSY/SOC 220, or ANTH/HIST/POLS/PSY/SOC 221, or ANTH/HIST/POLS/PSY/SOC 222, or ISSS 222; and c/i, c/pc, and c/vc. (on demand)
Upon completion of this course, the student should be familiar with basic set theory concepts, combinations and permutation problems, probability distributions, and basic probability computations. The student will also be introduced to calculator or computer technology used in simulating and calculating probabilities. Prereq: MATH 007 (M 095) grade C- or higher, or meet one Math Proficiency standard above, or c/i. (fall/spring)

Upon completion of this course, the student should be familiar with the basic concepts of descriptive and inferential statistics. The student should exhibit competence in describing data using measures of central tendency, measures of location, measures of dispersion, and various graphical techniques. The student should be able to compute confidence intervals and test hypotheses regarding population parameters. The student should be familiar with using calculators and computer software to conduct various statistical procedures including one- and two-way analysis of variance, correlation, and various non-parametric tests. Prereq: MATH 131 (STAT 121) grade C- or higher, or c/i. (fall/spring)

Upon completion of this course the student should be familiar with the basic concepts of descriptive and inferential statistics as applied in various areas of biology. The student should exhibit competence in describing data using measures of central tendency, measures of location, measures of dispersion, and various graphical techniques. The student should be able to compute confidence intervals and test hypotheses including derivation of sampling distributions (either theoretical, or derived via bootstrapping or randomization techniques) and the comparison of similar tests using statistical power. The student should be familiar with using calculators and computer software to conduct various statistical procedures including both parametric and nonparametric tests: t-test, sign test, Wilcoxon Rank-sum test, one-way ANOVA, Kruskal-Wallis test, two-way ANOVA, Friedman k-sample Test, regression, correlation, Chi-square and Kolmogorov-Smirnov Tests. Prereq: MATH 131 (STAT 121) grade C- or higher, or c/i. (fall)

This course will cover the basic concepts in this newly emerging field at the interface between mathematics and molecular biology. Students will begin with basic problems of sequence analysis and alignment and move to applications in genomics, phylogenetics, predicting protein structure, analysis of microarray data, and the construction of gene networks in metabolism and development. Students will learn how to access the various databases and write a research proposal in molecular biology that may serve as the basis for thesis work. Prereq: MATH 131 (STAT 121) and BIO 255 (BIOB 260) grade C- or higher; or/ci. (spring/odd-numbered years)

The course will focus on sampling design, statistical analysis, data collection, and the presentation of results. This is a field-based course that will prepare students to conduct research in ecology using statistical techniques appropriate for ecology. In addition to the nonparametric techniques of bootstrapping and randomization, students will learn the basic multivariate, time series, and spatial statistics employed in ecological analysis. Students will learn how to design sampling strategies, implement basic sampling techniques, collect data efficiently, analyze and present their data. Prereq: MATH 232 (M 217) or MATH/BIO 233 (STAT 233) grade C- or higher; or c/i. (fall)

This course serves as an introduction to mathematics statistics using calculus. Topics to be covered will include random variables, distribution and density functions, joint and conditional distributions, moment generating functions, technique for sums, convergence in distribution, convergence in probability, and the central limit theorem. Prereq: MATH 131 (STAT 121) and MATH 202 (M 172) grade C- or higher; or c/i. (spring/even-numbered years)

This is a course in stochastic processes with emphasis on model building and probabilistic reasoning. Topics to be covered may include a review of elementary probability theory, Poisson processes, discrete and continuous time Markov chains, Brownian motion, random walks, and martingales. Applications will be drawn from the physical, biological, and social sciences. Students will learn hands-on design and construction of working models using appropriate technology. Upon successful completion of this course, the student should be proficient in asking research questions, collecting and arranging data, and designing models to answer the questions asked. Prereq: MATH 131 (STAT 121) grade C- or higher, or c/i. (spring/odd-numbered years)
### THEATRE (THTR)

**[New OCHE rubric effective Fall 2010]**

**THTR 101 INTRODUCTION TO THEATRE (4)**
**Pre-Fall 2010 UMW course:** DR 101 Drama Fundamentals
The basics of drama—including formal theatre, improvisational drama, and narrative film and television—are story, place, audience, and actor. Students actively explore the relationships between these elements in a lab setting, by creating scenes based on selections from literature, current and historical events, cuttings from film scripts, and more. They analyze the purposes of drama, and learn about a variety of “Western” as well as non-European traditions. They study the responsibilities of the actor, script writer, director, and design staff in theatre and film productions. $15 Course Fee. (fall/spring)

**THTR 120 INTRODUCTION TO ACTING I (4)**
**Pre-Fall 2010 UMW course:** DR 276 Acting Fundamentals & Styles
Students apply principles of character creation, stage movement, script analysis, and acting theory for a variety of theatre performances including modern, post-modern, period styles, and dramatic verse. Activities include analyzing, rehearsing, and performing publicly. Students successfully completing this course will demonstrate competency in applying skills of performance to special textual needs including stylized comedy, modern realism, and heightened language. $10 Course Fee. (alternating semesters/every year)

**THTR 202 STAGECRAFT I: LIGHTING/COSTUMES (4)**
**Pre-Fall 2010 UMW course:** DR 243 Stagecraft & Costume
Students learn and apply stagecraft design and construction methods in several areas including lighting, stage rigging, set, costume, sound, and stage management. Students develop basic skills in a variety of stage arts by applying learned skills to a specific production. Those who successfully complete the course exhibit competencies in identifying stagecraft problems, devising potential solutions, and putting solutions into practice. $15 Course Fee. (spring/even-numbered years)

**THTR 205 THEATRE WORKSHOP II (V 1-2) R-3**
**Pre-Fall 2010 UMW course:** DR 217 Theatre Practicum
Hands-on experience for those interested in becoming involved with performance, technical, and box-office duties within the campus production program. Projects must be designed in consultation with the faculty member in charge. $10 Course Fee. (fall/spring)

**THTR 276 PLAY PRODUCTION & INTRODUCTION TO DIRECTING (4) R**
**Pre-Fall 2010 UMW course:** DR 241 Play Production & Introduction to Directing
Students produce and direct a work of dramatic literature for the stage, learning processes of theatre performance through hands-on practice and study. Upon successful completion of this course, students demonstrate basic knowledge and skills in several areas of play production including safety, script selection and analysis, casting, rehearsal, performance, and directing. $25 Course Fee. (fall)

**THTR 290 INDEPENDENT STUDY (V 1-4)**
**Pre-Fall 2010 UMW course:** DR 290 Independent Study
Directed research or study is conducted on an individual basis. Students design projects in such areas as play analysis, stage design, or theatre history with individual faculty members who guide the research and help the student formulate individualized learning outcomes. Prereq: c/i, c/i, and c/i. (fall/spring)

**THTR 338 DRAMA FOR YOUTH (2)**
**Pre-Fall 2010 UMW course:** DR 346 Drama for Youth
With theoretical and practical training in selection of playscripts and story material, acting, pantomime, and simple staging techniques, students will demonstrate abilities in designing and leading drama activities with youth. Creative drama, reader’s theatre, children’s theatre, and puppetry activities are explored with attention to drama’s use in elementary schools and community youth programs. (fall/even-numbered years)

**THTR 397 METHODS: DRAMA FOR K-12 (2)**
**Pre-Fall 2010 UMW course:** DR 351 Classroom Drama Methods
Candidates develop an understanding of teaching drama as an art form as well as drama’s use for learning about other subject areas. Focus is on the middle through senior high school setting. State and national standards in drama and theatre education are studied, and concepts applied. Stimulating environments, materials, and tools are considered and safe methods practiced. Candidates develop teaching strategies in improvisational drama and script development, drama history and literature, staging and spectacle techniques, and film and theatre analysis and criticism. Effective techniques for assessing students’ progress in the arts are modeled and practiced. Peer teaching and field experiences are required. Prereq: TEP and completion of all drama courses required for the Minor; or c/i. (fall)
TRIO 204 PEER TUTORING (V 1-4)
Pre-Fall 2010 UMW course: DR 466 Storytelling
TRIO 204 Peer Tutoring
TRIO 204 Peer Tutoring
Upon completion of this course, students will be familiar with various types of tutoring strategies that can be used in individual and small group settings. Communication skills, planning, academic skills building, information processing models, and presentation techniques will be addressed. Students are required to participate in a 4-hour tutor training session at the beginning of the semester and attend 2 tutor talk meetings during the semester. Students are expected to apply tutoring techniques, present a workshop in LACE, and assist as a student volunteer through LACE. Prereq: c/i and recommendation of faculty from area of tutoring emphasis. (fall/spring)

Note: credit for WRIT 095 is not applicable to graduation; credit may not count as part of load for financial aid purposes; credit may not count as part of load for eligibility purposes. Grades, honor/grade points, or credits for WRIT 095 are not used in calculation of the GPA.
response, and self-evaluation. In preparation for this course students will be expected to read, prior to the block, a text selected by the department. Prereq: Writing Proficiency Standard (page 8), or ENG 091 (WRIT 095) grade C- or higher. (fall/spring)

**WRIT 313 WRITING FOR PUBLICATION (4)**

**Pre-Fall 2009 UMW course:** ENG 313 Writing for Publication

An examination of the process of writing for publication. Students will learn how to address a specific audience and market their work, as well as how to write it. (fall)

**WRIT 321 ADVANCED TECHNICAL WRITING (4)**

**Pre-Fall 2009 UMW course:** ENG 350 Technical & Professional Communications

This course builds upon reading, writing, and public speaking skills introduced in ENG 102 (WRIT 101). It intensively surveys varieties and strategies of written and oral presentations common in contemporary work settings including technical writing, editing, small group communications, and PowerPoint presentations, among others. The course is designed to refine students’ abilities in oral communications and broaden their repertoire of writing styles. Prereq: ENG 102 (WRIT 101), or c/i.
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