



**Catalog**  
**2020-2021**

Updated 1/8/2021

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*Please see our website for updates to this catalog made after July 1, 2020.  
The most current official version of this catalog is available at*

<http://HelenaCollege.edu/catalog/default.aspx>



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# 2020-2021 Institutional Calendar \*Subject to Change\*



## Institutional Calendar 2020-2021

\* orientation and registration dates subject to change

Fall 2020		
Monday	July 27	Application Priority Date
Monday	August 10	Final Application Deadline
Monday	August 10	Students registered on or before this day who have not paid/finalized their bill will be dropped from classes at the end of the day and fees may be applied.
Wednesday	August 12	Fall Orientation - Online Airport Campus
Thursday	August 13	Fall Orientation - Online Donaldson Campus
Friday	August 14	Fall Orientation - Online Donaldson Campus
Monday	August 17	Fall Semester Classes Begin
Tuesday	August 18	Students registered on or before this day who have not paid/finalized their bill will be dropped from classes at the end of the day and fees may be applied.
Wednesday	August 19	Last day to add classes without instructor permission
Wednesday	August 26	Last day to add classes <i>(instructor permission required)</i>
Friday	September 4	Last day to drop without record and receive a partial refund
Friday	September 4	Students registered on or before this day who have not paid/finalized their bill will be dropped from classes at the end of the day and fees may be applied.
Monday	September 7	<b>Labor Day - College Closed</b>
Thursday	September 24	Last day to drop first half only class
Wednesday	September 30	Part 1 of Alcohol EDU and Sexual Assault Prevention due <i>(Fall)</i>
Monday	October 5	First Half Semester Classes End
Tuesday	October 6	Second Half Semester Classes Begin
Wednesday	October 7	Mid-term grades due
Monday	October 12	<b>Columbus Day - College OPEN and classes in session</b>
Monday	October 19	Registration begins for current students
Monday	November 2	Graduation applications are due for Spring/Summer 2021 graduates
Tuesday	November 3	<b>Election Day - College Closed</b>
Wednesday	November 4	Last day to drop classes
Monday	November 9	Registration begins for new students
Wednesday	November 11	<b>Veteran's Day - College Closed</b>
Monday	November 16	Last day to drop second half only class
Monday	November 23	Winter Session Application Deadline
Wednesday	November 25	<b>Last Day of Fall Semester Classes</b>
Thursday-Friday	November 26-27	<b>Thanksgiving Break - College Closed</b>
Tuesday	December 1	Grades Due
Friday	December 4	Grades Posted to MY HC
Winter 2020/2021		
Monday	December 7	Beginning of Winter Session
Monday	December 7	Students registered on or before this day who have not paid/finalized their bill will be dropped from classes at the end of the day and fees may be applied.
Tuesday	December 8	Last day to add classes without instructor permission
Thursday	December 10	Last day to add classes <i>(instructor permission required)</i>
Thursday	December 11	Last day to drop without record and receive a partial refund
Friday	December 25	<b>Christmas Day - College Closed</b>
Monday	December 28	Spring 2021 Applications Priority Date
Friday	January 1	<b>New Year's Day - College Closed</b>
Wednesday	January 6	Last day to drop classes.
Wednesday	January 13	End of Winter Session
Friday	January 15	Grades Due
Friday	January 22	Grades Posted to MY HC
Spring 2021		
Friday	January 1	<b>New Year's Day - College Closed</b>
Monday	January 11	Students registered on or before this day who have not paid/finalized their bill will be dropped from classes at the end of the day and fees may be applied.
Friday	January 15	Final Application Deadline
Thursday	January 21	Spring Orientation - Online
Friday	January 22	Spring Orientation - Online (tentative)
Monday	January 25	Spring Semester Classes Begin
Tuesday	January 26	Students registered on or before this day who have not paid/finalized their bill will be dropped from classes at the end of the day and fees may be applied.
Wednesday	January 27	Last day to add classes without instructor permission
Wednesday	February 3	Last day to add classes <i>(instructor permission required)</i>
Friday	February 12	Last day to drop without record and receive a partial refund
Friday	February 12	Students registered on or before this day who have not paid/finalized their bill will be dropped from classes at the end of the day and fees may be applied.
Friday	February 12	Students registered on or before this day who have not paid/finalized their bill will be dropped from classes at the end of the day and fees may be applied.
Monday	February 15	<b>President's Day - College Closed</b>
Friday	February 26	Part 1 of Alcohol EDU and Sexual Assault Prevention due <i>(Spring)</i>
Friday	March 5	Last day to drop first half only class
Tuesday	March 16	First Half Semester Classes End
Wednesday	March 17	Second Half Semester Classes Begin
Thursday	March 18	Mid Term Grades Due
Monday	April 5	Registration begins for current students
Wednesday	April 14	Last day to drop classes

Updated October 7th, 2020



### Institutional Calendar 2020-2021

\* orientation and registration dates subject to change

Monday	April 26	Last day to drop second half only class
Monday	May 3	Registration begins for new students
Monday	May 3	Graduation applications are due for Fall 2021 graduates
Wednesday	May 5	Last day of classes
Friday	May 7	Grades Due
Saturday	May 8	Graduation
Wednesday	May 12	Grades Posted to MY HC
<b>Summer 2021</b>		
Monday	May 10	Beginning of Aviation Summer Session
Thursday	May 20	Summer Orientation - Online
Monday	May 24	Beginning of first 5-week session and 10-week session
Tuesday	May 25	Last day to add first 5 week session classes without instructor permission
Wednesday	May 26	Last day to add 10 week session classes without instructor permission
Thursday	May 27	Last day to add first 5 week session classes <i>(instructor permission required)</i>
Friday	May 28	Last day to add 10 week session classes <i>(instructor permission required)</i>
Friday	May 28	Last day to drop first 5 week session classes without record and receive partial refund
Monday	May 31	<b>Memorial Day - College Closed</b>
Wednesday	June 2	Part 1 of Alcohol EDU and Sexual Assault Prevention due <i>(first 5-wk, 6-wk, 10-wk sessions)</i>
Monday	June 7	Last day to drop 10 week session classes without record and receive partial refund
Friday	June 18	Last day to drop first 5 week session classes
Monday	June 21	Beginning of 6 week session
Tuesday	June 22	Last day to add 6 week session classes without instructor permission
Thursday	June 24	Last day to add 6 week session classes <i>(instructor permission required)</i>
Friday	June 25	End of first 5-week session
Monday	June 28	Beginning of second 5-week session
Monday	June 28	Last day to drop 6 week session classes without record and receive partial refund
Tuesday	June 29	Last day to add second 5 week session classes without instructor permission
Thursday	July 1	Last day to add second 5 week session classes <i>(instructor permission required)</i>
Friday	July 2	Last day to drop second 5 week session classes without record and receive partial refund
Sunday	July 4	<b>Independence Day</b>
Monday	July 5	<b>Independence Day (observed) - College Closed</b>
Tuesday	July 6	Part 1 of Alcohol EDU and Sexual Assault Prevention due <i>(second 5-wk session)</i>
Friday	July 16	Last day to drop 10 week session classes
Thursday	July 22	Last day to drop 6 week session classes
Friday	July 23	Last day to drop second 5 week session classes
Friday	July 30	End of 10-week, second 5-week, and 6 week sessions

*Note: Exchange Columbus Day Holiday (10/12) for Friday following Thanksgiving (11/27)*

Updated October 7th, 2020





## General Information

Mission Statement

Core Themes

Vision Statement

Strategic Plan

Accreditation, Certification, and Approval

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# General Information

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## Mission Statement

Helena College, a comprehensive two-year college, provides access to and support of high quality lifelong educational opportunities for our diverse community.

## Vision Statement

Helena College will be recognized as a responsive regional provider of comprehensive educational opportunities, as a partner in economic and community development, and as a diverse and accessible community of learners. Helena College will promote excellence in education, maintain fiscal and operational integrity; and cultivate an environment of fellowship, inclusiveness, and respect.

## Core Themes

Through an inclusive campus and community-wide discussion of Helena College's purpose and goals, three core themes have been identified individually and collectively to define the College's mission.

- Student Access and Success
- High Quality Education
- Community Enrichment

## Strategic Plan

In May of 2011, a strategic planning day was held at Helena College. From this campus-wide event including all faculty, staff and administrators, six themes emerged that were further developed by the College Council into the College's 2012-2022 Strategic Plan. In 2017, the campus community reviewed the strategic plan and provided feedback on the existing goals and objectives. Informed by this process, the Strategic Planning, Assessment and Accreditation Committee subsequently refined and consolidated the College's strategic plan into the following five goals and related objectives.

### 1. PROMOTE STUDENT SUCCESS AND ACHIEVEMENT

- Construct academic pathways for undergraduate education that enable seamless career transition or postsecondary educational transfer.
- Increase educational access and support for a diverse student population through community efforts and collaboration.
- Promote a culture of collaboration and communication that ensures that the College meets its mission.

### 2. ADVANCE ACADEMIC EXCELLENCE AND SCHOLARSHIP

- Provide relevant and enriching instruction academic programs that address the evolving job market and global community.
- Utilize research and assessment data to make evidence-based decisions regarding curriculum, instruction, and programming.
- Demonstrate that students have learned requisite knowledge and skills relevant to their educational goals.

### 3. BUILD COMMUNITY ENGAGEMENT AND PARTNERSHIPS

- Foster collaborative partnerships with business, industry, and the broader community to enhance workforce development and lifelong learning.
- Evaluate and respond to on-going and emerging community educational and workforce needs.
- Expand civic engagement opportunities through work-based learning and other real-world educational experiences.

### 4. MODEL AND FOSTER EQUITY, INCLUSION, AND CULTURAL COMPETENCY

- Ensure that recruitment and hiring practices promote equity and inclusion.
- Develop a diversity and inclusion action plan with measurable outcomes and ongoing assessment.
- Deliver professional development and other training to support the increased cultural competency of students and employees.

### 5. ENSURE INSTITUTIONAL INTEGRITY

- Maintain and enhance a transparent process for resource prioritization and allocation that fosters efficient, effective and equitable use of fiscal resources.
- Procure and allocate resources to support the mission of Helena College.
- Devise and implement performance metrics for assessing institutional progress towards identified goals.
- Maintain and systematically assess a strategic enrollment plan that supports the mission of Helena College.

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## Accreditation, Certification, and Approval

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Helena College University of Montana is accredited by the Northwest Commission on Colleges and Universities.

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

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

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

Northwest Commission on Colleges and Universities  
8060 165th Avenue N.E., Suite 100  
Redmond, WA 98052 (425) 558-4224  
[www.nwccu.org](http://www.nwccu.org)

In addition, the Automotive Technology program is certified by the National Automotive Technicians Education Foundation (NATEF), the Aviation Maintenance Technology program is approved and licensed by the Federal Aviation Administration, and the Practical and Registered Nursing programs are approved by the Montana State Board of Nursing. The Accrediting Commission for Education in Nursing (ACEN) has awarded accreditation to the Associate of Science Registered Nursing Program. The Fire and Rescue program is accredited by the International Fire Service Accreditation Congress (IFSAC).

All educational programs offered at Helena College are approved by the Montana Board of Regents, United States Department of Education, United States Bureau of Indian Affairs, The United States Department of Veterans Affairs, and the Montana Department of Vocational Rehabilitation Services.



## Additional Opportunities & Support

Learning Opportunities for High School Students  
Dual Credit Courses  
College Credit Only  
Access to Success  
Adult Education  
TRIO Student Support Services  
Community Engagement & Workforce Development  
Office of eLearning

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## Learning Opportunities for High School Students

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High school students seeking an early start toward earning college credit can participate in dual enrollment opportunities, which include dual credit and college credit only courses. Dual enrollment courses are provided at a reduced cost for tuition and fees. Earned credit may be transferable to other colleges and universities.

### Dual Credit Courses

Helena College provides dual credit courses for high school students through agreements across the region with the following high schools: Broadwater High School, Capital High School, Drummond School, Granite High School, Helena High School, Montana Digital Academy, Jefferson High School, Manhattan High School, Seeley Swan High School, and Sentinel High School. Dual credit allows students to enroll in courses at their high schools that satisfy diploma requirements and provide college credits applicable towards degree and certificate programs at Helena College. Earned credits are accepted by the high school and Helena College. Course availability varies by high school location.

### College Credit Only

The College Credit Only Program allows area high school students the opportunity to experience the college environment by taking classes at Helena College. Eligible students can start working on a degree or certificate program offered by the College or earn transferable credits towards a four-year degree from the Montana University System.

All students interested in dual enrollment will need to meet the following requirements:

- Students must satisfy any course prerequisites or placement requirements.
- Students must be 16 years of age, in their junior or senior year, and must provide proof of high school enrollment or participation in a home school program.
- Students must submit a Dual Enrollment Application and Registration Form.

Students interested in dual enrollment opportunities should contact Stephanie Hunthausen, Director of K-12 Partnerships, 406-447-6993, [stephanie.hunthausen@helenacollege.edu](mailto:stephanie.hunthausen@helenacollege.edu).



### **Access to Success**

In an effort to improve options for those students severely at-risk or who have completely dropped out of high school, Helena College and the Helena School District have formed a partnership called Access to Success. This pathway serves as a model dropout recovery/reengagement program in the Helena community.

Access to Success is a high school diploma completion program. All coursework is provided in an adult learning environment. The program is housed on the Helena College campus. Eligibility is limited to those persons 16 and over not currently enrolled in school and who do not have a high school diploma. Those not meeting eligibility requirements will be referred to other skill-building programs within the district.

In Access to Success, students have the opportunity to pursue their high school diploma while also given the chance to enroll in college classes. Some classes offer dual credit and allow students to work simultaneously toward their high school diploma and post-secondary goals. For students meeting the entry-level course placement requirements and in need of the core high school credit, the option for dual credit will be provided at no cost to the student.

Maintaining small class sizes is essential to creating a supportive learning environment. All students begin by taking a course titled “Strategies for Success” while concurrently taking courses required for their high school diploma. Each student will be supported through individual case management and small class size. Students also have access to all the support services provided on the Helena College campus. It is our hope that this opportunity will open new doors for those in need within our community.

For more information, contact:

**Access to Success**  
Helena College (Room 004)  
1115 N. Roberts Street  
Helena, MT 59601  
406-447-6380



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# Adult Education

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## Helena Adult Learning Center

Services include:

- Create Career or College Pathway Plan
- Preparation for Higher Education, including trade programs, certification, and 2 year or 4 year institutions.
- Increase skills required for employment
- Build Literacy and Math Proficiency
- Preparation for HiSET

Orientation, advising, and minimum-hours of attendance are considered part of a student's obligation for accessing the FREE services provided by the Adult Learning Center. Class sessions are offered every six weeks.

Focuses on preparing students for employment and or college readiness. This includes preparation for the HiSET (High School Equivalency Test).

## HiSET Testing Center

Provides the students the opportunity to take the HiSET Exam (high school equivalency test) without accessing other services offered through the Adult Learning Center.

For more information, contact:

### Adult Education

Helena College

1115 North Roberts St. Room 117

Helena, MT 59601

Phone: 406-447-6387

Quick Text: 406-686-2021





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# TRIO Student Support Services

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## Program Description

TRIO Student Support Services at Helena College is a federal grant-funded program committed to serving 140 students each year. Our dedicated staff partner with student participants in achieving academic, career, financial, and personal success through a variety of services and programs. The TRIO SSS program helps students overcome economic, social, and academic challenges.



## Eligibility Criteria

Students must meet all four of the criteria below:

1. Be a citizen or national of the United States, or meet the residency requirements for Federal student financial assistance.
2. Be a degree-seeking student enrolled in a minimum of 6 credit hours per regular semester and having the objective of completing 18-24 credit hours per year.
3. Demonstrate a need for academic support, as determined by this program through an application process, in order to successfully pursue a post-secondary educational program.
4. Be at least one of the following:
  - a. First generation college student status (neither parent has completed a 4-year degree);
  - b. Income qualified (as described by the U.S. Department of Education guidelines); or
  - c. An individual with a documented disability (physical, mental, or learning).

## Program Services

**Academic Advising:** Individualized advising, academic coaching & support.

**Transfer Advising:** Assistance in transfer preparation and planning; opportunities to visit 4-year campuses and connect with partner TRIO programs.

**Wellness Case Management & Counseling:** Support in healthy lifestyle practices and all dimensions of wellness.

**Financial Literacy & FAFSA Support:** Financial education programming & assistance in FAFSA completion.

**Scholarship Assistance:** Opportunities for students to craft and record their personal stories; aid in identifying and applying for scholarships.

**Tutoring:** Individualized, group, and online tutoring to aid in coursework.

**Technology Assistance:** Hotspots and iPads available for checkout through the library; additional help with Moodle, online course navigation, and other programs as needed.

**Early Registration:** TRIO participants select and register for classes prior to the first day of registration.

**Leadership Development:** Opportunities available through TRIO S2S club and annual TRIO Leadership Conference.

**Community Engagement:** Events and activities build community; TRIO Moodle page for online engagement.

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# Community Engagement & Workforce Development

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## Lifelong Learning and Professional Development

Helena College Community Engagement & Workforce Development extends the resources of the College by providing a wide range of high quality non-credit training and educational opportunities, developed and delivered in response to the community – for individuals, businesses, and families.

Enrichment programs allow individuals to pursue quality education and explore interests through an ever-changing array of short courses in:

- Painting, drawing, creative writing, foreign languages
- Digital photography, basic computers, knife building, welding
- Wildland firefighting, small business class, personal finance classes
- Professional development and career training courses and more

Our non-credit professional certificate programs and professional development courses are designed to help each individual reach his/her full potential, whether you are new to the workforce, enhancing your current career, or working to meet licensure/certification requirements. Courses are designed to meet industry standards and many prepare you to test for state and national certification. A wide array of our career training certificate courses are offered online while courses such as our Reserve Officer Training, Certified Nursing Assistant, Certified Clinical Medical Assistant, Pharmacy Technician and Phlebotomy Technician are offered in a traditional classroom setting.

Classes are offered on an ongoing and continuous basis. They range in length from one hour to 30+ hours in duration and may be eligible for college credit or continuing education units. Our courses are affordable and convenient for your lifestyle. We offer evening, weekend, lunchtime and online courses to meet the needs of working professionals and families. For a listing of our current course offerings, view our website at [www.HelenaCollege.edu/continuinged](http://www.HelenaCollege.edu/continuinged).

To register for classes, please use our convenient, online registration or call Community Engagement at 406-447-6946.

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## Office of eLearning

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The Office of eLearning expands and complements the programs at Helena College by offering a variety of online and hybrid learning experiences for our diverse student community.

As a student taking an online or hybrid course, you will be able to access your online course content through the Moodle course portal available from the Helena College website. Moodle is our online learning management system.

In order to locate your class in Moodle, go to [www.HelenaCollege.edu](http://www.HelenaCollege.edu). Choose “Portals” (top right), then “Portal”:

- Click on the Moodle icon.
- Click on ‘NetID Login’.
- Enter your NetID and Password.
- Click on ‘My Courses’.

Once you have accessed Moodle, you will find a variety of student resources on the Moodle homepage. The ‘Moodle Tutorial for Students’ course can assist you with learning and navigating Moodle.

Delivery methods using Moodle include the following as outlined in BOR Policy 303.7:

- Distance Education is defined as planned learning that normally occurs in a different place from teaching, requiring specialized course design, instructional techniques, communication through various technologies, and special organizational and administrative arrangements. Both synchronous and asynchronous learning are included in this definition.
- Face-to-Face/Enhanced delivery is characterized when instruction occurs in a traditional classroom with face-to-face interaction between the instructor and students, at any local campus or remote site, and includes utilization of technology to enhance the class without reducing student seat-time.
- Internet or Online delivery implies that 100% of the course section is offered completely online and delivered asynchronously, with no face-to-face interaction between instructors and students.\*\*
- Video Conferencing is characterized by a course section offered through scheduled (synchronous) interactive video, including desktop conferencing.
- Blended learning is designed specifically to be delivered partially online in an asynchronous format and partially through face-to-face (F2F) interaction, typically in the classroom. Both online and F2F interactions are required for the course. This delivery is characterized by the expectation of reduced F2F class meeting time when compared to the equivalent credit classroom course.
- Other Distance Learning includes courses other than internet/online and interactive video, and may include correspondence courses, tape/DVD delivery, etc.

*\*\*Some online classes may require synchronous (e.g. chat rooms, online meetings, webinars, etc.) and/or onsite learning events (e.g. field trips, testing sites, etc.). Contact the instructor for more details on a specific class.*

*All Hybrid (HO) and Online (O) have an associated per credit fee of \$17.50 for Hybrid and \$35 for Online Courses.*

If you need any assistance with eLearning, please contact:

**The Office of eLearning**  
[elarning@HelenaCollege.edu](mailto:elarning@HelenaCollege.edu)  
406-447-6364

Updated 5/6/2020



## Admission Requirements and Procedures

Helena College Welcome Center  
Application Process  
Orientation  
Veteran Priority of Service  
Immunizations  
Residency Requirements  
Safety and Security Considerations  
Western Undergraduate Exchange (WUE)  
Credit by Examination  
Transfer of Credit  
Montana University System Transfer Initiative  
Policy of Nondiscrimination  
Placement Assessment

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# Admission Requirements and Procedures

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## Helena College Welcome Center

The Welcome Center provides assistance to new and readmitting students. Prospective students in search of an application, class schedule, information about courses and programs of study, financial aid, admissions guidance, or who want to check the status of a submitted application may contact the Welcome Center at 406-447-6900. The Welcome Center is located next to the main entrance of the Donaldson Campus (Room 101).

## Application Process

Open admission allows any student who might benefit from a Helena College education the opportunity to enroll in classes. Applications for admission are accepted and processed in the order they are received. The deadline for priority admission consideration is one month prior to the start of each semester and complete applications are due one week before the start of each semester. Students are encouraged to apply early as financial aid is offered and programs are filled on a first-come, first-served basis. Acceptance for admission to the College does not guarantee acceptance or placement in any particular program. Prospective students should review the Program Offerings section of the catalog for specific program requirements. Falsification or willful suppression by a student of any information called for on an application for admission may be grounds for cancellation or denial of admission.

## First-Time and Transfer Admission

Students who plan to earn a degree or certificate, or enroll in seven or more credits in any one semester must submit the following information:

1. A completed and signed application for admission.
2. A \$30 non-refundable application fee.
3. Proof of immunization if born after December 31, 1956; proof of age if born before January 1, 1957. (See Immunization section)
4. Official high school transcripts received from an accredited high school with a graduation date posted, a copy of GED, HiSET scores, or Accuplacer test scores demonstrating Ability to Benefit. Non-accredited high school graduates will be required to provide ACT/SAT or Accuplacer scores to meet ability to benefit requirements.
5. Official college transcripts, if applicable.

## Non-Degree Admission

Non-Degree admission is designed for students seeking personal enrichment who do not plan to earn a degree or certificate, do not seek financial aid, and who enroll in seven credits or fewer in any one semester. The deadline for non-degree admission/registration is the fifth day of classes each semester. The following information needs to be submitted:

1. A completed and signed application for admission.
2. A \$30 non-refundable application fee.
3. Demonstrated completion of any prerequisites or necessary placement testing.

## Readmission

Students who have previously attended Helena College as degree-seeking students must reapply for admission if they have been absent from the College for two or more consecutive academic semesters (excluding summer). Readmitted students must follow current catalog requirements upon return. The procedure for readmission to Helena College is as follows:

1. Submit a completed and signed application for readmission.
2. Submit official transcripts from all college(s) attended since last attending Helena College, if applicable.
3. If readmission follows academic suspension from Helena College, applicants must submit an academic plan with their application for readmission. Readmission is conditional upon approval of the academic plan by the Admissions Review Committee.

## Application Fee

A \$30 non-refundable application fee is required of all first-time applicants to The University of Montana campuses, including The University of Montana, Missoula College, Montana Tech, Highlands College, The University of Montana – Western, and Helena College. If a student does not enroll within one calendar year of application fee payment, the application fee expires. After attending any of the Montana University System institutions, students may submit a Transmittal application and the appropriate fee as an application to any institution within the system. For more information, please seek assistance from either the Admissions or Executive Director of Enrollment offices.

## Orientation

Orientation is held for all new students and students who have been absent from the College for two or more consecutive academic semesters, excluding summer. Orientation sessions are offered prior to and during the beginning of each semester. College policies, procedures, regulations, and financial aid information are explained to students. Orientation information is mailed to all accepted students approximately three weeks prior to the orientation session. All degree-seeking students are charged an orientation fee, and orientation is mandatory.

**Vet Resources:** See page 48.

## Immunizations

All students enrolling in seven or more credits are subject to the following requirements in accordance with Montana state law (ARM 37.114.711):

1. Students born in 1957 or later must provide evidence that they have received two measles and two rubella immunizations, with dose one administered at 12 months of age or later and dose two administered at least 28 days after dose one. No measles vaccination before 1967 is valid. No rubella vaccination before 1969 is valid. As an alternative, students may supply a laboratory report from a CLIA approved laboratory indicating that the student is immune to measles and/or rubella.
2. Student may be conditionally enrolled for an initial term if they have not received the second dose of measles and/or rubella vaccine provided they receive the second dose at least 28 days after the first dose and before the beginning of the succeeding school term.
3. A student may be exempt from the above requirements for medical reasons (ARM 37.114.715) providing the student supplies a statement from a physician (MD or DO) holding a license to practice in the United States or Canada stating:
  - a. The specific immunization is contraindicated;
  - b. The time period the immunization is contraindicated;

**and**

  - c. The reasons for the contraindication.
4. A student may be exempt from the above requirements for religious reasons providing the student supplies a notarized statement that immunizations are contrary to the student's religious beliefs. This notarized statement must be submitted annually by any student claiming a religious exemption (ARM 37.114.716).

5. A student may be exempt from the above requirements for medical reasons (ARM 37.114.715) providing the student supplies a statement from a physician (MD or DO) holding a license to practice in the United States or Canada stating:

- d. The specific immunization is contraindicated;
- e. The time period the immunization is contraindicated;

**and**

- f. The reasons for the contraindication.
6. A student may be exempt from the above requirements for religious reasons providing the student supplies a notarized statement that immunizations are contrary to the student's religious beliefs. This notarized statement must be submitted annually by any student claiming a religious exemption (ARM 37.114.716).

## Residency Requirements

The Montana University System classifies applicants for admission and current students as either in-state or out-of-state for fee purposes. In general, a person must meet the requirements listed below to qualify for in-state status:

1. A person must be physically present in Montana for twelve (12) or more consecutive months without an absence in excess of a total of 30 days. One must demonstrate by appropriate actions during the twelve-month period the intent to make Montana one's permanent home. The required twelve-month period does not begin until specific actions are taken to change legal ties to Montana.
2. An individual must be at least 51% financially self-sufficient during the entire twelve-month period and may not be claimed as an exemption under federal income tax regulations by someone filing an out-of-state federal tax return.
3. A person must have filed a Montana income tax return or have had Montana income tax withheld as required by state tax laws during the twelve-month period.
4. If a person owns or operates a motor vehicle in Montana, he/she must license the vehicle in Montana within 60 days of moving. If a person does not own or operate a vehicle. They should obtain a Montana State ID within 60 days.
5. An individual must register to vote in Montana if he/she expects to exercise the right to vote.
6. If an individual chooses to attend any unit of the Montana University System during the twelve-month period of continuous physical presence, he/she must limit enrollment to a maximum of seven credits per semester.

There are additional regulations concerning married persons and others with special circumstances. The basic rules for making the classification are found in the Student Guide to Montana's Residency Policy and can be obtained from the Welcome Center or [www.HelenaCollege.edu](http://www.HelenaCollege.edu). Contact Admissions and Records at 406-447-6912.

Subject to Board of Regents Policy 940.1, a student may petition for a change in classification status or appeal an initial residency determination. Students petitioning for reclassification need to complete and submit the residency questionnaire to the Helena College Admissions Evaluator. The burden of proof, including production of required documentation, is upon the individual seeking reclassification. To be eligible to receive in-state status for a particular term of enrollment, the individual must be eligible for in-state status on or before the 15th instructional day of the term, and the reclassification petition must be submitted by that date. Otherwise, a change in classification is effective on the first official day of enrollment for the first term following the date the petition is received by the Admissions Office unless the late filing of a Montana individual income tax form is required, in which case the effective date is the date of filing the tax form. The final decision by Admissions and Records may be appealed to the Commissioner of Higher Education, and the Commissioner's decision may be appealed to the Board of Regents. An appeal shall be submitted to the campus administration for transmittal to the Commissioner and must be submitted within 14 calendar days of the final campus decision.

### **Safety and Security Considerations**

Pursuant to Board of Regents Policy 301, Helena College may deny or condition admission, readmission, or continuing enrollment of any individual who, in the judgment of the campus, presents an unreasonable risk to the safety and welfare of the campus and persons thereon. In making such judgment, the campus may, among other things, take into account the individual's history and experience relative to (1) violence and destructive tendencies, (2) behavior at other educational institutions, and (3) any rehabilitative therapy the individual may have undergone. A decision to utilize the authority conferred by this paragraph shall be communicated to the individual in writing. Any such decision may be appealed in writing to the Dean/CEO.

### **Western Undergraduate Exchange (WUE)**

Students who are residents of Alaska, Arizona, California, Colorado, Hawaii, Idaho, Nevada, New Mexico, North Dakota, Oregon, South Dakota, Utah, Washington, and Wyoming may be eligible to participate in the Western Undergraduate Exchange (WUE) program. If selected, students pay reduced fees which are approximately one and one-half times current resident fees. WUE application materials will be sent to students from participating states. Contact Admissions and Records with WUE-related questions. Admissions and Records will offer available WUE waivers on a first-come first-served basis to qualifying applicants. This offer extends to the completion of a student's program or two years, whichever comes first, provided the student: 1) maintains a 2.5 cumulative grade point average; 2) does not change his or her program of study; 3) completes a minimum of 12 credits each semester of enrollment; and 4) does not change his or her state of legal residence. Students who change any of these conditions stated above may lose the WUE offer. Appeals will be considered on a case by case basis and should be directed to the Executive Director of Enrollment.

### **Credit by Examination**

Students may be awarded credits by examination through the following three options:

- **College-Level Examination Program (CLEP)**  
Required scores on the respective CLEP exams will warrant full course credit in the equivalent Helena College course. Official results must be sent directly from the CLEP Testing Center to Admissions and Records.
- **Advanced Placement (AP)**  
A score of 3, 4, or 5 on an AP exam for any equivalent Helena College course will warrant the award of full course credit. Official results must be sent directly from the AP testing center to Admissions and Records.
- **Credit by Exam (CBE)**  
Students may receive credit through nationally recognized professional licenses or certificates gained through examinations. Students must be able to provide the original certification document and examples of the curriculum for the certification. The student must verify the certification through his or her advisor and the Executive Director of Enrollment Office. If curriculum and certification cannot be verified, the student may be able to show competencies through the challenge process. Students should refer to the Challenge Policy for more information.

A student will receive a grade of "EC" for any credits awarded through CLEP/AP/CBE. The total credits awarded for CLEP and CBE for a student cannot exceed 25% of the credits required for his or her degree.



## Transfer of Credit

Students who have previously attended a regionally accredited technical school, college, or university may be eligible to receive transfer credits. Upon receipt of an official transcript, Helena College will cooperate with students to make a fair decision with regard to their transfer credits. Students should be aware of the following transfer credit guidelines:

- Courses must be college-level, defined as those courses that are applicable toward a certificate, an associate of applied science, associate of arts, associate of science, or baccalaureate degree at their respective institution. In all cases, such courses shall not include remedial or developmental courses.
- Montana Board of Regents Policy 301.5.2 guarantees that coursework completed in the last five years will be reviewed for possible use in a student's specific program of study, and coursework completed in the last fifteen years will be reviewed for possible use to satisfy general education requirements or as elective coursework. The guarantee provides only that courses falling into the relevant time periods will be analyzed for possible use in a student's degree program. It does not guarantee that the courses will be automatically accepted. Further, the policy allows individual Montana University System campuses discretion with regard to consideration of outdated coursework; however, since it is a discretionary decision, it cannot be challenged. The provisions of this policy also govern the evaluation of "outdated" classes that have been completed at Helena College. Students with outdated coursework are encouraged to contact Admissions and Records or the appropriate academic department.
- Courses must have been completed with a letter grade of C- or higher, or a Pass from a Pass/No Pass grading method if the course would apply to the student's intended program of study. (Students should refer to the Academic Information section for limits on pass/no pass credits.)
- All programs of study require that one-third of the academic credit hours be earned at Helena College.
- Courses accepted for transfer credit will appear on a student's transcript. The credits will be calculated into the total credits earned, but grades earned for accepted transfer credits will not be included in the grade point average (GPA).
- Completion of a student's admission file by the priority deadline, which is one month prior to the first day of classes of the term for which a student has applied, will facilitate the processing of evaluation of transcripts for transfer credit.

Students will be notified in writing of the admission decision, the total number of credits accepted for transfer to Helena College, and the transferability of general education and/ or elective credits within ten working days of the receipt of a completed transfer application on or before the priority deadline. Students seeking transfer of credits to satisfy degree and/or certificate requirements must have their official transcripts reviewed by faculty from the appropriate academic program.

Students completing their transfer application before the priority deadline will be notified of the transferability of credits towards specific degree and/or certificate requirements no later than the last day to add classes for the intended term of entry.

Students who complete their transfer application after the priority deadline will receive a complete evaluation of their credits for transfer and will be notified of the results prior to registration for the following academic term.

Students wishing to appeal decisions made regarding their transfer credits must submit a signed written request to the Admissions Office. Appeals with regard to the transferability of credits to satisfy degree and/or certificate requirements will be reviewed by the appropriate program faculty and/or division director as needed. Appeals with regard to the transferability of general education and/or elective credits will also be reviewed by the appropriate faculty and/or division director as needed. Students who have submitted their appeal in a timely manner will receive a response and final decision prior to registration for the following academic term.

Students with questions or who need further information about transfer policies should contact Admissions and Records at 406-447-6912 or 406-447-6907.

### Montana University System Transfer Initiative

To help students plan their transfer within the Montana University System, a transfer initiative was implemented in 2007. The initiative incorporates common course name and numbering to make the transition from institution to institution easier. For more information, see the MUS Common Course Numbering Transfer Guide online at [www.mus.edu](http://www.mus.edu). Students wishing to transfer Helena College credits to another college or university should contact the Admissions Office at the receiving institution for information and policies concerning the evaluation and acceptance of transfer credits.

## Policy of Nondiscrimination

Helena College is committed to providing all persons an equal opportunity for education, employment, and participation in activities as provided by law. It is unlawful:

1. To exclude, expel, limit, or otherwise discriminate against an individual seeking admission as a student or an individual enrolled as a student in the terms, conditions, or privileges of the institution because of race, creed, religion, sex, marital status, color, age, physical handicap, national origin, service in federally or state defined uniform service, veteran status, political ideas, genetic information, gender identity, gender expressions, sexual orientation or physical or mental handicap, unless based on reasonable grounds;
2. To make or use a written or oral inquiry or form of application for admission that elicits or attempts to elicit information or to make or keep a record concerning the race, color, sex, marital status, age, creed, religion, service in federally or state defined uniform service, veteran status, political ideas, genetic information, gender identity, gender expressions, sexual orientation, physical or mental handicap, or national origin of an applicant for admission;
3. To print, publish, or cause to be printed or published a catalog or other notice or advertisement indicating a limitation, specification, or discrimination based on the race, color, creed, religion, age, physical or mental handicap, sex, marital status, or national origin of an applicant for admission;  
**or,**
4. To announce or follow a policy of denial or limitation of educational opportunities of a group of its members through a quota or otherwise, because of race, color, sex, marital status, age, creed, religion, service in federally or state defined uniform service, veteran status, political ideas, genetic information, gender identity, gender expressions, sexual orientation or physical or mental handicap, or national origin.

In addition, this facility may not be used in the furtherance of any discriminatory practice, nor become a party to an agreement, arrangement, or plan which has the effect of sanctioning discriminatory practices. Racial or sexual harassment of students or faculty is unlawful.

This policy is in compliance with the requirements of Titles VI and VII of the Civil Rights Act of 1964 as amended, Title IX of the Educational Amendments of 1972, Titles VII and VIII of the Public Health Act, the Rehabilitation Act of 1973, the Americans with Disabilities Act, the Montana Human Rights Act and the Montana Governmental Code of Fair Practices. Helena College is an equal opportunity/affirmative action employer. The catalog, advertisements, and recruitment material will present programs and information in a way to discourage sexual stereotyping.

Helena College shall ensure that the non-discrimination policy, as it affects applicants and students, is published and disseminated. Resources who have disabilities should contact Disability Services if accommodations are needed or if obstacles are encountered at Helena College. Students should follow the complaint procedure outlined in the Helena College Student Handbook if they believe this policy of nondiscrimination is not being followed.

Any person wishing more information regarding Helena College's policy and process as they relate to Discrimination, Harassment, Sexual Misconduct, Stalking and Retaliation, may do so through contacting:

### Airport Campus

Deputy Title IX Coordinator, Tammy Burke  
[tammy.burke@HelenaCollege.edu](mailto:tammy.burke@HelenaCollege.edu)  
406-447-6352

### Donaldson Campus

Mary Twardos, HR Human Resource Generalist  
[mary.twardos@HelenaCollege.edu](mailto:mary.twardos@HelenaCollege.edu)  
406-447-6925

The **Title IX Coordinator and Section 504/Title II Coordinator, Valerie Curtin**, may be contacted at 406-447-6913 or [valerie.curtin@HelenaCollege.edu](mailto:valerie.curtin@HelenaCollege.edu).

**\*\*Updated 12/3/2020\*\***

## Placement Assessment

Students must submit Accuplacer test scores to assist with placement. A writing sample may be required from students to assist with placement into the appropriate writing course. ACT and SAT scores, the Montana University System Writing Assessment (MUSWA), and transferable college credits will also be considered for math and English placement in accordance with Board of Regents policies. Placement testing results demonstrating a need for developmental coursework necessary to meet program requirements may require lengthening a student's program of study. Placement test scores older than three years from the time of enrollment are not accepted. Placement testing results are not used to determine a student's admission status to Helena College except as necessary to determine Ability to Benefit. There is a \$30 fee for Accuplacer testing. Please call 406-447-6939 to schedule an Accuplacer test session or text 406-686-2021.

### ACCUPLACER / ACT / SAT – Placement Chart

<b>MATH – Placement</b>				
	<b>ACT</b>	<b>SAT</b>	<b>ACCUPLACER</b> Quantitative, Algebra, Statistics	<b>ACCUPLACER</b> Advanced Algebra Function
<b>M092</b> Algebra I M105 Contemporary Math w/005 M108T Business Math M111T Technical Math M120T Math w/Health Care App	19 & below	Needs ACCUPLACER	200-300	200-219
<b>M093</b> Algebra II (STEM Prep) M105 Contemporary Math M115 Probability and Linear Math M132 Numbers & Ops K-8 Teachers M133 Geometry & Geometric K-8	20	490	QRAS does not determine M093 placement. With a score higher than 263, tester will take AAF for placement.	220-249
<b>M121</b> College Algebra M234 Advanced Topics K-8 *STAT216 Introduction to Statistics	22	530		250-262
<b>M151</b> Pre-Calculus	24	570		263-270
<b>M171</b> Calculus I	27	610		271-300

**Bold** = Placement code in Banner (SOATEST)

\*Students that successfully pass any 100-level Gen Ed Core math course, with a C- or better, are eligible to take STAT216

	<b>ACT</b>	<b>SAT</b>	<b>ACCUPLACER</b>
<b>WRIT 101 W/096</b> College Writing W/Lab	17 & Below		200-249
<b>WRIT 101</b> College Writing Writ 121T	18 ELA or Higher	7 Essay 440 Writing	250-300

**Bold** = Placement code in Banner (SOATEST)

**\*\*Updated September 2019\*\***

**PLACEMENT TEST SCORES ARE VALID FOR 3 YEARS.**



## Expenses

2019-2020 Tuition & Fee Schedule  
Books & Supplies  
Deferred Fee Payment Plan  
Non-Payment  
Payment of Tuition and Fees  
Vocational Rehabilitation  
Tuition Refunds

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# Expenses

## 2019-2020 Tuition & Fee Schedule

*All fees are subject to Board of Regents approval.*

The Board of Regents has approved the fee schedule; however, fees are subject to change without notice. Final approved schedules are available in Business Services and online on the Commissioner of Higher Education's website. Tuition and fees are based on credit hours and are paid by the student each semester. Different fee schedules are applied for students with WUE residency. Contact Business Services for more information. The \$30.00 registration fee is non-refundable.

Credits	Registration Fee	Tuition	Bldg Maint Fee*	Comp Tech Fee**	Equip Fee	Acad Fac Fee	Student Bldg Fee	Library Fee	Stud Gov	Wellness Fee	In State Tuition	NR Bldg Fee	NR Inc Fee	Non Res Total
1	30.00	108.59	4.04	8.59	4.08	2.09	5.20	1.55	35.00	15.00	214.14	3.70	244.67	462.51
2	30.00	217.18	8.08	17.18	8.16	4.18	10.40	3.10	35.00	15.00	348.28	7.40	489.34	845.02
3	30.00	325.77	12.12	25.77	12.24	6.27	15.60	4.65	35.00	15.00	482.42	11.10	734.01	1,227.53
4	30.00	434.36	16.16	34.36	16.32	8.36	20.80	6.20	35.00	15.00	616.56	14.80	978.68	1,610.04
5	30.00	542.95	20.20	42.95	20.40	10.45	26.00	7.75	35.00	15.00	750.70	18.50	1,223.35	1,992.55
6	30.00	651.54	24.24	51.54	24.48	12.54	31.20	9.30	35.00	15.00	884.84	22.20	1,468.02	2,375.06
7	30.00	760.13	28.28	60.13	28.56	14.63	36.40	10.85	35.00	15.00	1,018.98	25.90	1,712.69	2,757.57
8	30.00	868.72	32.32	68.72	32.64	16.72	41.60	12.40	35.00	15.00	1,153.12	29.60	1,957.36	3,140.08
9	30.00	977.31	36.36	77.31	36.72	18.81	46.80	13.95	35.00	15.00	1,287.26	33.30	2,202.03	3,522.59
10	30.00	1,085.90	40.40	85.90	40.80	20.90	52.00	15.50	35.00	15.00	1,421.40	37.00	2,446.70	3,905.10
11	30.00	1,194.49	44.44	94.49	44.88	22.99	57.20	17.05	35.00	15.00	1,555.54	40.70	2,691.37	4,287.61
12	30.00	1,303.00	48.40	103.00	48.90	25.00	62.40	18.50	35.00	15.00	1,689.20	44.30	2,936.00	4,669.50
13	30.00	1,303.00	48.40	103.00	48.90	25.00	67.60	18.50	35.00	15.00	1,694.40	44.30	2,936.00	4,674.70
14	30.00	1,303.00	48.40	103.00	48.90	25.00	72.80	18.50	35.00	15.00	1,699.60	44.30	2,936.00	4,679.90
15	30.00	1,303.00	48.40	103.00	48.90	25.00	78.00	18.50	35.00	15.00	1,704.80	44.30	2,936.00	4,685.10
16	30.00	1,303.00	48.40	103.00	48.90	25.00	83.20	18.50	35.00	15.00	1,710.00	44.30	2,936.00	4,690.30
17	30.00	1,303.00	48.40	103.00	48.90	25.00	88.40	18.50	35.00	15.00	1,715.20	44.30	2,936.00	4,695.50
18	30.00	1,303.00	48.40	103.00	48.90	25.00	93.60	18.50	35.00	15.00	1,720.40	44.30	2,936.00	4,700.70
19	30.00	1,303.00	48.40	103.00	48.90	25.00	93.60	18.50	35.00	15.00	1,720.40	44.30	2,936.00	4,700.70
20	30.00	1,303.00	48.40	103.00	48.90	25.00	93.60	18.50	35.00	15.00	1,720.40	44.30	2,936.00	4,700.70
21	30.00	1,303.00	48.40	103.00	48.90	25.00	93.60	18.50	35.00	15.00	1,720.40	44.30	2,936.00	4,700.70
22	30.00	1,303.00	48.40	103.00	48.90	25.00	93.60	18.50	35.00	15.00	1,720.40	44.30	2,936.00	4,700.70

\* Includes Access Fee of \$1.36 and Building Fee of \$2.68 per credit

\*\* Includes Computer Fee of \$4.14 and Technology Fee of \$4.45 per credit

- Students will be charged a \$35 per credit fee associated with courses provided by online (O) delivery
- Students will be charged a \$17.50 per credit fee associated with courses provided by hybrid (HO) delivery
- All new students are charged a \$15.00 Identification Card Fee, and all new degree-seeking students are charged a \$30.00 Orientation Fee in addition to the above schedule

**Additional fees may be charged for students registered in some programs and/or courses. Contact Business Services at 406-447-6921 for information.**

## Books & Supplies

Helena College Retail Services consists of two Bookstores, one on each campus, and the Coffee Counter. The Bookstores provide, supplies, apparel, hot food, beverages, and snacks Monday through Friday during the academic year. The Bookstores accept cash, credit cards (except for American Express), and checks made payable to Helena College for the amount of purchase only. The Donaldson Campus Bookstore also features a full-service Coffee Counter with a wide selection of hot and cold drinks. Bookstore East is located on the Airport Campus and sells, supplies, food, snacks, and beverages Monday through Friday during the academic year. The College is not liable for any personal work performed by students. Course materials can be purchased online at <https://bncvirtual.com/helenacollege>.

## Deferred Fee Payment Plan

A deferred fee payment plan is authorized providing that:

1. At least one quarter of total fees are paid at the time the deferred fee payment plan is initiated,
2. An additional one quarter is paid within the first 30 days of the semester,
3. An additional one quarter is paid within the first 60 days of the beginning of the semester, and
4. The full amount is paid in full within 90 days of the beginning of the semester.

Tuition and mandatory fees less any financial aid are eligible for deferral. Execution of a promissory note with the terms and conditions of the deferment will be required. Log into MyHC to complete the application for the deferred payment plan. This plan is not available for the summer semester or to any person with an outstanding debt to the College. The Deferred Payment Agreement must be renewed by Business Services at the beginning of each semester.

Students participating in this plan will be assessed an administrative charge of \$30 each semester. Failure to make scheduled payments will result in the student being ineligible for future deferment and may result in cancellation of a student's enrollment with no refund of payments already collected. A \$15 fee will be assessed each time a scheduled payment is late.

## Non-Payment

Any person who owes the College any fees, fines, or other charges will not be permitted to receive a transcript, diploma, certificate, or academic record; to register or attend classes; or to access any College facilities or services until the debt has been paid or satisfactorily adjusted through Business Services. Interest may be charged at the rate of 10% on the balance due from the day after the due date until the full amount has been paid, and any attorney's fees or other costs or charges necessary for the collection of the amount owed may be added to the balance due.

## Payment of Tuition and Fees

Your schedule bill is a combination of your class schedule, the number of credits you have registered for, and the amount it costs to attend Helena College. Until your schedule and corresponding bill are finalized by you online, by mail, or in person, you are not a student at Helena College. Your financial aid will not disburse to your account.

If the schedule bill is not paid/finalized by the published payment deadline, you will be dropped from all classes. Please see the published payment dates in the Student Guide.

How do you access your schedule bill online?

- Go to MyHC, log in to your account
- Select Student Services and Financial Aid
- Select Payment and Account Information
- Select Pay and Finalize your Registration Bill

*Note: Financial aid will not be applied to your account until you finalize your schedule bill by the payment deadline. If this is not completed, you will be dropped from your classes.*

Remember, after you have accepted your financial aid, you must wait 24 hours for your account to reflect that you have Financial Aid funds for your tuition. If you do not wait, the system will require you to use a credit card or e-check for payment. Please contact the Financial Aid Office with questions.

## What if you have funding from an outside source?

If your outside source funding is not posted on your schedule bill, notify Student Accounts. You must finalize your bill online even if your balance is zero. If you have questions about your third party payment, call Student Accounts at 406-447-6921.

*Note: Even if you do not have a balance due, you must pay/finalize your bill with Business Services.*

## Vocational Rehabilitation

Certain persons with an employment disability may qualify for education assistance through the Rehabilitative/Visual Services Division, Montana Department of Social and Rehabilitation Services. Students should contact that office at 406-447-6952 for more information.

*Note: This information must be included on the Financial Aid Offer and will be included in a student's eligibility for financial aid.*

## **Tuition Refunds**

Tuition refunds are made through Business Services subsequent to a student's withdrawal from a course(s). Refunds of fees are authorized according to the following procedures only if the student officially withdraws from the College and/or drops courses in the required manner:

- The \$30 registration fee and the \$30 application fee are non-refundable.
- Class days are determined by the College calendar of instructional days, not by the student's class schedule.
- Refunds for withdrawal or dropping a class for courses or summer semester are computed on a pro-rated basis.

Withdrawal from school applies only to students dropping all courses: (Registration and Application Fees are non-refundable.)

- 100% of all remaining tuition and fees are refunded before the first class day of the semester or half semester in which the course begins.
- 90% of all remaining fees will be refunded to the end of the 5th instructional day of the semester or half semester in which the course begins.
- 75% of all remaining fees will be refunded to the end of the 10th instructional day of the semester or half semester in which the course begins.
- 50% of all remaining fees will be refunded to the end of the 15th instructional day of the semester or half semester in which the course begins.
- Beginning the 16th instructional day of the semester or half semester in which the course begins, no refunds will be made.

Course add/drops apply to students making course schedule changes but remaining in attendance at the College:

- An individual course dropped will be refunded at 100% for the first 15 days of the semester or half semester in which the course begins.
- Beginning the 16th instructional day of the semester or half semester in which the course begins, no refunds will be made.
- A processing fee of \$10 per request will be assessed to add a course or courses after the 5th day of the semester or to drop a course or courses after the 15th day of classes.



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## Financial Aid

Eligibility Requirements for Federal Financial Aid  
Financial Aid Notification  
Accepting Financial Aid  
Student Responsibilities  
Helena College Scholarships & Offers  
Tuition Waivers  
Federal Financial Aid  
Financial Aid Satisfactory Academic Progress (SAP) Policy  
Return of Federal Title IV Funds Policy  
Withdrawal Dates  
Drug-Related Convictions  
Incarcerated Students

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# Financial Aid

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Financial aid administered by the Financial Aid Office at Helena College is based on an evaluation of academic accomplishments, financial need, and availability of resources. Students may qualify for Helena College scholarships, offers, and grants or state and federally sponsored grants, work-study, and loans. Information about eligibility, applying for and accepting aid, and types of aid are outlined in this section. Some general points:

Scholarships are offered for each academic year.

- Offers are usually made in the spring for the following academic year.
- Helena College does not discriminate on the basis of race, creed, religion, sex, marital status, color, age, physical handicap, national origin, service in federally or state defined uniform service, veteran status, political ideas, genetic information, gender identity, gender expressions, sexual orientation or physical or mental handicap in the administration of its scholarship program.
- Most scholarships administered by the College are divided evenly between fall and spring semesters.
- Scholarships are not offered during the summer session.
- Recipients of selected offers must inform the donor and/ or Financial Aid Office of their acceptance.

The following is an example of how financial aid is determined:

The cost of attendance is determined by the College in October of each year for the following academic year. The cost of attendance for a full-time, in-state student for 2020-2021 is as follows:

Tuition and Fixed Fees	\$3,362
Room Allowance	\$5,346
Board Allowance	\$2,680
Personal Expense Allowance	\$3,994
Transportation Allowance	\$3,155
Loan Fee Allowance	\$65
Book and Supplies Allowance	\$1,420
Total Cost of Attendance	<hr/> \$20,022

If a student has applied for federal aid, Helena College accesses the estimated family contribution (EFC) information electronically from the federal processor. If Helena College is not indicated on the Free Application for Federal Student Aid (FAFSA) as a school that should receive the Student Aid Report (SAR), the student must submit a copy of the SAR to the Financial Aid Office or correct their FAFSA by adding the code for Helena College. The College's code is 007570.

Helena College subtracts the EFC amount from the cost of attendance. The resulting amount is the financial need per federal eligibility guidelines.

An example of the calculation is:

Financial Aid Cost of Attendance	\$20,022
Less: Calculated EFC (assume \$2,000)	\$2,000
Calculated Financial Need	<hr/> \$18,022

Financial aid offers are developed using information available at the time of packaging and may be revised if enrollment status and/or financial status change.

\*\*Updated 5/6/2020

## Eligibility Requirements for Federal Aid

- Acceptance to Helena College as a degree-seeking student.
- Priority is given to students with FAFSA results submitted to Helena College by December 1.
- Possess either a high school diploma, GED, HiSET, or completed a state recognized home school curriculum.
- Completed the Free Application for Federal Student Aid (FAFSA) and submitted as soon as possible after the first business day in October. The information should be sent to Helena College, Title IV Code 007570. A FAFSA must be completed each year the student desires financial aid.

*Note: Submitting a FAFSA ensures that a student will be considered for all financial assistance from Helena College and the state and federal government.*

- The student should review the Student Aid Report (SAR) sent by the processing center and submit necessary corrections to the Financial Aid Office.

*Note: The FAFSA application for the 2021-2022 year will be available in October of 2020. The application will be based on the student's (and parent's or spouse's) 2019 income tax information. This is to assist students in preparing for the financial responsibilities of attending college. The Financial Aid Office will be available for assistance with this process.*

## Financial Aid Notification

Students who have been accepted for admission as a degree-seeking student and for whom the College has received results of the FAFSA on or before December 1 will receive need-based financial aid packages in January. The packages will contain all financial aid offers by and through Helena College with directions how to accept and receive the offers. After January, students will receive financial aid packages as they are admitted to the College and the results of the FAFSA become available.

Approximately 30% of all FAFSA applicants are selected for a process called verification by the U.S. Department of Education. In this process, Helena College will be comparing information from the FAFSA with IRS Federal tax transcripts (and/or parent's/spouse's), W-2 forms, or other financial documents. The law requires the College verify this information before disbursing federal financial aid. If there are differences between the FAFSA information and supplied financial documents, Helena College will make corrections electronically and notify the student in writing.

Verification must be completed no later than 14 days prior to the end of the spring semester of enrollment, the aid year for which a FAFSA was filed. A student's failure to complete verification will result in the cancellation of all federal and institutional need-based aid. In addition:

- No financial aid will be released until verification is completed.
- Students employed under the federal or state work-study programs cannot work without completing verification.

Helena College must review the requested information, under the financial aid program rules (34CFR, Part 668).

In some cases, the Financial Aid Office will re-evaluate financial aid offers based on special circumstances. If a student or student's family have special needs or have recently experienced unusual financial circumstances, they should contact the Financial Aid Office. A Special Circumstance/Professional Judgment form is available on the Financial Aid Forms page of the Helena College website.

Financial aid is not available for audited or challenged courses.

A student may not receive financial aid to repeat a course more than one (1) time for courses previously passed. According to federal regulations for financial aid purposes, a grade of "D" is considered passing.

## Accepting Financial Aid

- A postcard notification stating financial aid is ready to be accepted will be mailed to accepted students beginning in January or after Helena College receives FAFSA information.
- The student should acknowledge acceptance of the financial aid by accepting and submitting offer preference on their MyHC account online at [www.HelenaCollege.edu](http://www.HelenaCollege.edu) and should promptly return all required documentation requested. Student's aid offer will not be finalized until all completed paperwork is submitted and processed.
- Financial aid will be disbursed in two installments during the semester. The first installment will occur 7-10 business days after the 15th instructional day and will consist of all grants, all scholarships, and 1/2 student loans for the term. The second installment will be the remaining 1/2 of the student loans for the term and will be disbursed 7-10 business days after successful midterm grades have posted.
- Financial Aid, except for work-study offers, will be credited directly to your student account in Business Services on the aforementioned disbursement dates.

*Note: Students who are first-time loan borrowers will not receive their first loan disbursement until 30 calendar days after the start of the first term of attendance.*

## Student Responsibilities

Upon acceptance and receipt of financial assistance of any kind, it becomes the student's responsibility to notify the Financial Aid Office in writing of changes in financial and/or enrollment status. A change in enrollment and/or financial status may result in revision of financial aid offers. Changes include:

- Change in the number of enrolled credits;
- Change in name, address, or telephone number;
- Change in financial status, including any additional scholarships, grants, or other benefits received; **and**
- Withdrawal from the College. Students who withdraw from Helena College during a semester may be responsible for repayment of all or a portion of any financial aid received for the semester. Return of federal fund procedures is federally regulated. Students should contact the Financial Aid Office for additional information.

## Helena College Scholarships & Offers

Listed below is a partial list of scholarships available to Helena College students. A complete and up-to-date list can be found on the Helena College website. Some scholarships are offered by the College and others are offered by community organizations, business firms, endowment funds, etc. For more information, students should contact the Financial Aid Office.

- Boeing Access to Education
- Everett D. Potter Scholarship
- Gianforte Manufacturing Scholarships
- Harold Hamm
- Helena College Foundation Scholarships
- Intermountain Children's Home
- Montana Food Distributors Association
- Opportunity Bank of Montana
- Peter Nelson Scholarships
- Reach Higher Montana
- Shodair Children's Hospital
- Soroptimist Training Program
- Soroptimist Vocational Technical Scholarships
- Student Senate Scholarships

## Private Scholarships

Many private organizations provide financial assistance to Helena College students. Scholarship information may be obtained by contacting civic, professional, religious, or other community organizations in addition to high school guidance offices and the internet. Listing of web resources is available on the Financial Aid page on the Helena College website. One such website is [www.smartaboutcollege.org](http://www.smartaboutcollege.org). Private scholarships are generally applied one-half to each successive semester after the funds are received.

## Tuition Waivers

The Montana Board of Regents has authorized the waiver of either full or partial tuition for certain categories of students.

These categories include:

- Native Americans
- Montana Veterans
- War Orphans
- Dependents of Prisoners of War
- Senior Citizens
- Surviving Dependents of Montana Firefighters or Peace Officers
- Faculty and Staff
- MUS Employee Dependent
- MUS High School Honors

Applications for tuition waivers must be completed within 14 days of the start of the semester in which the student wants to utilize the waiver. For more information and applications, please see the Financial Aid page on the Helena College website.

## Federal Financial Aid

Students should complete the FAFSA after October 1 and request the Student Aid Report (SAR) be sent to Helena College, Title IV Code 007570. It takes approximately 4 to 6 weeks for a paper FAFSA application to be processed. Applications submitted via the internet take considerably less time (<https://studentaid.gov>). Students (and parents, if applicable) must have a Federal Student Aid (FSA) ID, which will be comprised of a user-selected username and password, to electronically sign the FAFSA electronically (<https://studentaid.gov>). Students must re-apply for federal aid each year. Delays in receiving financial aid are often the result of late or incomplete submission of the FAFSA. Priority date for Helena College is December 1.

Eligibility for the below indicated federal financial aid resources depends on submission of the FAFSA. The Student Aid Report (SAR), resulting from the FAFSA, provides an expected family contribution (EFC), which is used to determine eligibility for federal need-based financial aid.

1. Federal Pell Grants and Federal Supplemental Education Opportunity Grants (FSEOG) are offered to students with exceptional financial need.

*Note: Pell grants are limited to 12 full-time semesters. FSEOG funds are limited.*

2. Federal Iraq and Afghanistan Service Grants may be offered to students whose parent or guardian was a member of the U.S. Armed Forces and died as a result of service performed in Iraq or Afghanistan after September 11, 2001. The grant offer is equal to the amount of the maximum Pell Grant for the academic year, not to exceed the cost of attendance for that academic year. Offer amounts are subject to change based on federal funding.

3. Work-study employment opportunities are available through the need-based Federal Work Study (FWS) as well as the need-based and non-need based State Work Study (SWS) programs. Limited funds are offered on a first-come, first-served basis, in accordance with Helena College policy. Offers are usually between 10 and 15 hours per week. These funds are not offered within the financial aid offer. If students are interested in work-study, they need to contact the Financial Aid Office.
4. Loan monies at federally regulated interest rates are available to students and their parents. Federal loans are offered on a need and non-need basis as documented through the FAFSA.
  - a. Federal Direct Loan – available to students on either a need (subsidized) or non-need (unsubsidized) basis. Subsidized loans do not accrue interest upon disbursement or while the student is attending college at least half-time. The federal government subsidizes the interest burden. Subsidized loan eligibility is limited to 150% of the student’s program of study. Unsubsidized loans do accrue interest upon disbursement. Unless the student pays the interest while in school, the interest will capitalize on top of the principle amount upon repayment status. Interest rates are set annually in accordance with federal regulations.
  - b. Federal PLUS (Parent) Loan – for parents of dependent students who want to borrow to help pay for their student’s education. Interest rates are set annually in accordance with federal regulations.

### College-Related Federal Tax Provisions

Helena College students and families may be eligible for selected education-related tax provisions of the Federal Taxpayer Relief Act of 1997, including:

1. American Opportunity Tax Credit provides a maximum \$2,500 per year tax credit (non-refundable) each eligible student for up to four years and up to \$1,000 of the credit can be refunded if your credit is more than you owe in taxes. Qualifying expenses include tuition, fees and required course materials.
2. Lifetime Learning Tax Credit provides a maximum \$2,000 per year tax credit (non-refundable) per family. This cannot be combined with the American Opportunity Tax Credit.
3. Student Loan Interest Deduction provides a non-refundable deduction (not credit) of interest on qualified education loans used to finance qualified education expenses. The maximum deduction each taxpayer is permitted equals \$2,500.
4. Tuition and fees deduction – taxpayers may be able to deduct up to \$4,000 paid toward qualified tuition and related expenses as an adjustment to income.

*Note: Students are advised that there are numerous eligibility requirements and other specifics contained in the tax provisions and should contact their tax advisor before making decisions. More detailed information can be found at <https://irs.gov>.*

### Financial Aid Satisfactory Academic Progress Policy

#### Requirements and Purpose

Federal regulations require that students make satisfactory progress toward attainment of a degree, diploma, or certificate objective in order to participate in federal student assistance programs. Helena College interprets federal intent of the satisfactory progress regulations as a means to prevent abuse of federal student assistance programs versus placing limitations on students.

Helena College’s financial aid satisfactory academic progress policy is provided to ensure compliance with federal regulations and to prevent abuse of federal student assistance programs while supporting students’ efforts to attain educational objectives. These standards represent minimum performance requirements based on federal statutes and regulations and do not necessarily coincide with academic program requirements. In addition to meeting these standards, a student must fulfill all other requirements to receive financial aid.

#### Indicators of Progress

- Financial aid Satisfactory Academic Progress (SAP) is measured ‘qualitatively’ and ‘quantitatively’.
- Quality of work is measured by cumulative grade point average (GPA) resulting from classes completed with Helena College.
- Quantity of work is measured against a maximum time frame in which the student must complete the educational objective. The quantitative measurement requires designation of a minimum amount of work a student must successfully complete (credit hours earned) by the end of designated periods of enrollment (full-time equivalent semesters). The quantitative measure is cumulative for all periods of enrollment and for all transfer credits, including periods of enrollment in which students did not receive federal student financial assistance.

#### Enrollment Status

Student status is based on the following:

- Full time (FT) – Attempting 12 or more credits
- Three-quarter time (QT) – Attempting 9-11 credits
- Half-Time (HT) – Attempting 6-8 credits
- Less-than-half-time (LTHT) – Attempting 5 or fewer credits

For financial aid offering and satisfactory academic progress purposes, enrollment status is based on credit hours for which the student is enrolled as of the published date considered to be the 15th instructional day of the term for the majority of students. Financial aid will be adjusted to reflect less-than full-time status if the student is not registered for at least 12 credit hours on that date. Financial aid will not be adjusted to reflect credit hours added after that date. Students who are registered for a class on the first day of the term but never attend the class cannot include those credits in determining enrollment status for financial aid purposes. Financial aid will be adjusted if students are reported as never having started attendance in one or more of their classes. All summer sessions jointly are considered one term.

### **Students Subject to SAP Measurement**

Students currently enrolled and readmits are subject to SAP measurement. In most instances, a financial aid offer will be provided before grades are posted. If SAP standards have not been met, the financial aid offer is voided, pending appeal.

New students, including transfer students, while subject to SAP, are not measured for satisfactory academic progress until first semester grades at Helena College are posted.

### **SAP Measurement Date**

SAP measurement is made after completion of each semester.

### **Measurement Standards of SAP**

#### *Qualitative Measurement*

A student must possess a cumulative GPA of 2.0 or higher. A student must meet the qualitative standard in addition to the quantitative standards discussed.

#### **Quantitative Measurement**

Students must pass 70% of the cumulative credits attempted at Helena College in their degree/certificate program. Attempted credits will be based on a student's credit load at the end of the add period for each term. Audit and non-credit remedial work are not considered in the measurement of SAP. Remedial and repeated course work for which a student received credit multiple times is treated as any other course work. Incompletes are considered as credits attempted when considering maximum time frames. Transfer credits are also considered when determining maximum time frames. If a student withdrew from a class or classes after the 15<sup>th</sup> instructional day of the term, the student is considered to have attempted those classes, even though the student did not receive any earned credits for the classes. Withdrawal from classes has a negative impact on SAP measurement.

### **Duration of Eligibility**

Students are expected to complete their program of study within a reasonable time period. A student's maximum time frame is based on the total credit hours attempted at Helena College plus any transfer credits accepted towards the program of study. These limits apply regardless of whether or not the student has previously received financial assistance. Students are eligible to receive aid for up to 150% of the published number of credit hours required for a program of study (See program descriptions in the College catalog).

Example: If a program of study requires 60 credit hours to graduate, the maximum credit limit a student could take and receive financial aid would be 90 credits (60 X 150 percent). All credit hours attempted are counted.

At the end of each semester, the total number of attempted credit hours will be counted to determine if the student has reached the maximum number of credit hours for their program. All credit hours are counted and includes:

- Credit hours attempted in semesters student did not receive financial aid.
- Credit hours attempted prior to a change in program of study if those hours are applicable to student's new degree/certificate. A student will be allowed to change their program of study prior to receiving a degree/ certificate and must inform the Financial Aid Office of each change.
- Credit hours transferred from another institution into student's program of study at Helena College.

### **Consequences**

#### **Financial Aid Warning**

A student will be placed on financial aid warning if he/she either:

- Fails to maintain a cumulative GPA of at least 2.0
- or -
- Fails to complete 70% of cumulative attempted credit hours.

Helena College determines the student should be able to make satisfactory academic progress during the subsequent semester and meet the College's satisfactory academic progress standards at the end of the semester

During a warning semester, the student may still receive financial aid. The student's future financial aid eligibility is dependent upon how well the student does during the warning semester. If the student completes the required number of credit hours to reach the 70% cumulative pace measure and has a cumulative GPA of 2.0 or higher, the student will be removed from financial aid warning status and restored to good standing. If, however, the student again fails to meet one or both of those requirements, the student will have their financial aid terminated.



## Financial Aid Termination

A student will have their financial aid terminated if he/she:

- Fails to meet both qualitative and quantitative SAP requirements and has been determined unable to make satisfactory academic progress during the subsequent semester.
- Fails to meet the academic progress requirements at the end of a warning semester.
- Has been determined to have exceeded the maximum time frame OR has been determined unable to mathematically finish the program in the maximum time frame.

## Student Notification of SAP Decisions

The Financial Aid Office will, in most instances, measure SAP after developing a financial aid offer for a student. In this case, the student will be notified in writing if he/she has not met SAP standards and that the financial aid offer is cancelled. At the same time, the student will be notified of the appeal process (described below).

## Exceptions/Appeals

A student who is notified of failure to meet SAP standards may appeal the conclusion reached by the Financial Aid Office and/or request that he/she be granted an exception to the policy. The Executive Director of Enrollment Office must grant academic reinstatement to students on academic suspension before the Financial Aid Office will consider an appeal for financial aid eligibility reinstatement.

## Appeal Requirements

The student must respond in writing to the notification of failure to meet SAP standards. The response must be directed to the Financial Aid Appeals Committee at Helena College. The response must describe in specific terms why Helena College should grant an exception to its established SAP policy. At a minimum, the response must include the following:

1. A typed personal statement, plus supporting documentation, as appropriate, explaining the circumstances that led to failure to meet established SAP standards.
  - a. Overall experience:
    - 1) What most contributed to your not meeting the necessary standards the last time you attended? What steps have you taken to alleviate those issues moving forward?
    - 2) Did course load contribute to your lack of success? Would taking fewer credits/classes allow you to be more successful?
    - 3) What percentage of class periods did you miss? What caused these absences? Were you proactive in contacting your instructor regarding these absences?

- 4) How many hours a week have you dedicated to your schoolwork? Do you have a study routine? Explain that routine.
- 5) How often did you meet with your instructors to seek help the last time you attended?

### b. Tutoring and other campus resources:

- 1) Have you used tutoring services on campus? If so, name the tutoring services used and how often.
- 2) How often did you utilize the online tutoring service, smarthinking?
- 3) How often do you utilize the library?
- 4) How often do you have your writing efforts proofread?

### c. Other factors:

- 1) Do you have a preferred learning technique? If so, what is/are your preferred learning techniques?
- 2) How often did you meet with your advisor during the semester you were unsuccessful?
- 3) How many times a week do you check your Helena College email account?
- 4) What device do you use to interact with Moodle?
- 5) When on campus, where do you prefer to study?
- 6) Are you familiar with your course(s) syllabus?
- 7) Do you utilize the Student Handbook as a resource for policies and potential departments or individuals to contact for assistance? If so, who have you contacted, or what policy(ies) have you referred to?

2. The statement should also include a typed academic plan outlining how the student expects to meet the SAP standards, as well as the time frame in which the student expects to be back in compliance with such standards.

- a. What are your goals for the semester? (Or what do you plan to do to get off probation?) Include measurable objectives and methods. It is not enough to write, "I will study more." (ex. When will you study? How will you study? Where will you study?)
- b. While we are here to help you, you will be held accountable for your own academic progress and success.

- 1) What will you do to ensure the successful completion of your degree? (ex. What resources or services will you seek out? X hours spent with a tutor or completing work. Meet with advisor X times during the term.)

3. Copy of student's unofficial Helena College transcripts.
4. Copy of student's loan debt from the National Student Loan Database System (<https://nslds.ed.gov>).

## Appeal Deadlines and Processing

Appeals for financial aid eligibility reinstatement must be received in the Financial Aid Office no later than two weeks prior to the start of the term for which the student desires aid. Appeals will be reviewed by the Financial Aid Appeals Committee on a case-by-case basis as soon as possible and may take two weeks or more for an answer depending on the appeal volume at the time submitted. There will be no appeals accepted for financial aid reinstatement for the summer term.

The Financial Aid Director and Financial Aid Appeals Committee will review the student's response to make a decision on the appeal. Two actions may result on the appeal:

1. The Financial Aid Appeals Committee may deny the appeal. The Financial Aid Director is the final authority regarding SAP decisions. The student will be notified, in writing, of action on the appeal in a timely manner.
2. The Financial Aid Appeals Committee may approve the appeal. If so, the student will receive written notice of the approval along with conditions to be met in the future, if appropriate. A student may be approved in one of two statuses:
  - a. Probation: Helena College determines that the student should be able to make satisfactory academic progress during the subsequent semester and meet the College's satisfactory academic progress standards at the end of the semester.
  - b. Academic Recovery Plan: The Financial Aid Appeals committee refers the student to an academic coach. The student and advisor develop a plan that, if followed, will ensure the student is able to meet the institution's satisfactory academic progress standards by a specific point in time prior to completion of program.

Students approved for an Academic Recovery Plan will complete and sign a contract and plan with an academic coach. Both of these documents will be recorded in the Financial Aid Office and will be monitored by the Financial Aid Appeals Committee after every term. If a student is not academically progressing as planned, financial aid will be terminated.

The Academic Recovery Plan will require students to meet with their academic coach on a regular basis, as well as require certain activities. These activities could include, but are not limited to tutoring, limiting credit load, career counseling, taking the MCIS or CISS survey, attending workshops, or completing TRANSIT (a financial literacy module). The purpose of the plan is to support the student in a holistic manner to promote academic success and provide a clear pathway to completion.

## Requalification for Federal Student Financial

### Assistance after Failing to Meet SAP Standards

A student who is disqualified from participation in college, state, and federal student financial assistance programs may regain eligibility by satisfying the established SAP standards. This can be done by attending college without financial assistance. If a student is deemed not to be making satisfactory academic progress, but later meets the standards, his or her eligibility for aid is reinstated. The other option is the student can pay for and pass at least 6 credits on his/her own and re-submit a Financial Aid Reinstatement Appeal. This, however, is not a guarantee of financial aid reinstatement. A student may be paid for the semester in which he/she regains satisfactory academic progress, but may not be paid for any semesters in which the student did not meet the standards.

### Additional Information

- **Additional Degree:** Students who have obtained an Associate degree and wish to return to Helena College for a subsequent degree may not necessarily be eligible for Financial Aid. Changes from A.A.S. to A.S. or A.A. degrees will receive consideration as they are separate and distinct degree programs. The request for a subsequent degree must be submitted to the Executive Director of Compliance and Financial Aid with a degree audit from the Executive Director of Enrollment. If approved for a new degree or certificate, the student will be required to take only courses required for the new degree or certificate. It is the student's responsibility to only take courses for the program. Failing to do so may result in financial aid termination.
- **Challenged Courses:** Students may not receive financial aid for credits they successfully challenged.
- **Changed and Late Grades:** The student must notify the Financial Aid Office of grade changes, including updates for incomplete or missing grades. Grades must be officially changed in the Enrollment Office before financial aid will be reviewed.
- **Evaluation Time Frame:** Helena College will evaluate a student's satisfactory academic progress at the end of each semester: fall, spring, and summer. A student placed on financial aid warning or termination will be notified via U.S. mail to the current mailing or permanent address on record. It is the responsibility of the student to ensure addresses are correct via MyHC.
- **Incomplete:** An incomplete course is one for which no term credits were earned. It is construed as an "F" until a positive letter grade is recorded by the Enrollment Office. A student who is placed on warning or termination because of incomplete credits may request that the Financial Aid Office to review his/her status upon course completion.

- **Remedial Courses:** Certain sub-100 remedial courses, which do not apply toward graduation requirements, may be included as part of a credit load for determining enrollment status each term. These courses can total no more than half the credit load per term and cannot exceed 30 credits.
- **Return of Federal Title IV Funds:** Federal regulations require colleges to recalculate a student's financial aid for those who officially or unofficially withdraw from classes prior to completing 60% of a semester to determine the amount of aid that was earned and unearned. The unearned portion will be returned to the Department of Education.

## Return of Federal Title IV Funds Policy

### Purpose

The purpose and intent of this policy is to provide guidance as to how Helena College will calculate the amount of Federal Title IV funds to be returned for a student who has withdrawn from all classes, inform interested parties of the methods and procedures used to calculate the amount, provide a fair and equitable policy, and provide a policy that conforms to federal regulations and its intent.

This policy governs the return of Federal Title IV funds disbursed for a student who completely withdraws from a term, payment period, or period of enrollment. It does not apply to a student who has dropped some classes but remains enrolled in other classes with Helena College. The general assumption is that a student earns aid based on the period of time he/she remains enrolled.

### The Process – General

1. The student meets with an advisor in the East End Advising area to discuss withdrawal and to complete a withdrawal form. The East End Advising area sends the student with the withdrawal form to the Financial Aid Office.
2. The Financial Aid Office calculates the amount of funds to be returned.
3. The Financial Aid Office notifies the student and Business Services of funds that Helena College must return and the amount the student must return to the Department of Education.
4. The Financial Aid Office returns its share of unearned Federal Title IV funds within 30 days after it determines the student withdrawal process is complete. The student must repay his/her share either by (1) paying loans in accordance with the terms and conditions of the promissory note or (2) repaying grants directly or under a payment arrangement through the College.

*Note: In addition to calculating a return of Federal Title IV funds for students who notify Helena College of a withdrawal, the College must also make a calculation for students who do not "officially" withdraw. The Financial Aid Office reviews final semester grades to evaluate students with all "F" grades*

*to determine if the student stopped attending all classes. If so, the last date of academic activity is obtained. To facilitate the process, the Executive Director of Enrollment has requested faculty to indicate last date of attendance for all students offered an "F" grade.*

### The Details

**Earned aid:** During the first 60% of the term, a student "earns" Federal Title IV funds in direct proportion to the length of time he/she remains enrolled. That is, the percentage of time during the period the student remained enrolled is the percentage of dispersible aid for the period that the student earned. A student who remains enrolled beyond the 60% point earns all aid for the term.

**Unearned aid:** The amount of disbursed Title IV aid that exceeds the amount of Title IV aid earned under the required formula. Unearned Federal Title IV funds, other than Federal Work Study, must be returned.

**Percentage of period enrolled:** The number of days the student remained enrolled divided by the number of days in the period. Calendar days are used, but breaks lasting more than five days are excluded from both the numerator and denominator. The number of days used to determine the enrolled percentage normally includes weekends; however, scheduled breaks are measured from the first day of the break to the next day that classes are held.

**Repayment of unearned aid:** The responsibility to repay unearned aid is shared by the institution and the student in proportion to the aid each is assumed to possess.

The institution's share is the lesser of:

- The total amount of unearned aid; **or**
- Institutional charges multiplied by the percentage of aid that was unearned.

The formula assumes that Federal Title IV funds are directly disbursed to a student only after all institutional charges have been covered, and that Title IV funds are the first resource applied to institutional charges. Institutional charges comprise the amounts that had been assessed prior to the student's withdrawal, not a reduced amount that might result from an institution's refund policy.

The institution's share is allocated among Title IV programs, in an order specified by statute, before the student's share. After the student's share is fully allocated among the Title IV programs, any amount owed to a grant program is reduced by half. Students return their share of unearned aid attributable to a loan under the terms and conditions of the promissory note.

### Time Frame for Returning Funds

The institution must return its share of unearned Federal Title IV funds no later than 30 days after it determines the student withdrew.

The student must repay his or her share either by:

1. paying loans in accordance with the terms and conditions of the promissory note, or
2. repaying grants directly or by a payment arrangement with the College or the Department of Education.

### Late Disbursements

A student who earned more aid than was disbursed prior to withdrawal is owed a late disbursement. Only the difference between earned aid and aid already disbursed may be disbursed late. Thus, conditions under which unearned aid must be returned and conditions under which a late disbursement is required are mutually exclusive.

The institution may credit late disbursements towards unpaid institutional charges. Authorizations for current year charges remain valid for late disbursements; authorizations for prior year charges become invalid.

Any portion of a late disbursement not credited to the student's account must be offered as a cash disbursement to the student (or parent in the case of a Federal PLUS Loan).

### Withdrawal Dates

#### • Unofficial Withdrawal

For students who withdraw without notifying the institution, the institution must determine the student's withdrawal date within 30 days after the expiration of the earlier date of the:

- Payment period or period of enrollment;
- Academic year in which the student withdrew; **or**
- Educational program from which the student withdrew.

The withdrawal date for unofficial withdrawals is the student's last date of attendance at a documented "academically-related activity" in lieu of any other withdrawal date. "Academically related activities" include activities confirmed by an employee of the institution, to include exams, tutorials, academic advisement, turning in a class assignment, and attending a study group assigned by the institution. Eating at institution provided food services and participating in off-campus study groups not assigned by the institution are not "academically related activities".

The only exception would be if the student left without notification because of circumstances beyond his/her control. The institution may determine a withdrawal date related to the circumstances. The Executive Director of Compliance and Financial Aid is responsible for making such a determination, along with the Executive Director of Enrollment and the Executive Director of Compliance and Financial Aid.

#### • Official Withdrawal

The withdrawal date for official withdrawals (student notified the institution that he/she was withdrawing) is the date the student completed the institution's withdrawal process or officially notified the institution of intent to withdraw, except the institution may, at its option, use the student's last date of attendance at a documented "academically-related activity" in lieu of any other withdrawal date. "Academically-related activities" include activities confirmed by an employee of the institution, to include exams, tutorials, academic advisement, turning in a class assignment, and attending a study group assigned by the institution. Eating at institution-provided food services and participating in off-campus study groups not assigned by the institution are not "academically-related activities."

The withdrawal date for a student who officially withdrew is the later of:

- The withdrawal; **or**
- The date of the student's notification to the institution.

For a student who unofficially withdrew (withdrew without notifying the institution), this date is the date the institution becomes aware the student ceased attendance. The "date of institution's determination that a student withdrew" is used for the following purposes:

- It provides the dividing date between disbursed aid and late disbursements; **and**
- It starts the clock for the period of time within which the institution must return federal funds.

### Suspension/Withdrawal

If a student is withdrawn based on a school-initiated suspension during a period of enrollment, the date used for the withdrawal date is as follows:

- If the student is given the option to appeal the suspension and does not appeal within the time frame allowed, the date of the initial suspension letter is used in the calculation.
- If the student does not appeal and can attend classes during the appeal process (regardless of whether they attend or not), the official date on the appeal denial letter from the College will be used for the calculations rather than the initial suspension letter date.

## **Drug-Related Convictions**

A federal or state drug conviction can disqualify a student for federal student aid. Convictions only count if they were for an offense that occurred during a period of enrollment for which the student was receiving financial aid. A conviction that was reversed, set aside, or removed from the student's record does not count, nor does one received when the student was a juvenile, unless he/she was tried as an adult.

The information below illustrates the period of ineligibility for financial aid on whether the conviction was for sale or possession and whether the student had previous offenses. (A conviction for sale of drugs includes convictions for conspiring to sell drugs.)

For a drug possession conviction, eligibility is suspended:

- One year from date of conviction for 1st offense;
- Two years from date of conviction for 2nd offense;
- Indefinite period for 3+ offenses.

For a drug sale conviction, eligibility is suspended:

- Two years from date of conviction for 1st offense;  
**or**
- Indefinite period for 2nd offense.

If the student was convicted of both possessing and selling illegal drugs, and the periods of ineligibility are different, the student will be ineligible for the longer period.

## **Regaining Eligibility after a Drug Conviction**

A student regains eligibility the day after the period of ineligibility ends or when he/she successfully completes a qualified drug rehabilitation program. Further drug convictions will make him or her ineligible again.

Students denied eligibility for an indefinite period can regain eligibility only after successfully completing a rehabilitation program as described below.

## **Standards for a Qualified Drug Rehabilitation Program**

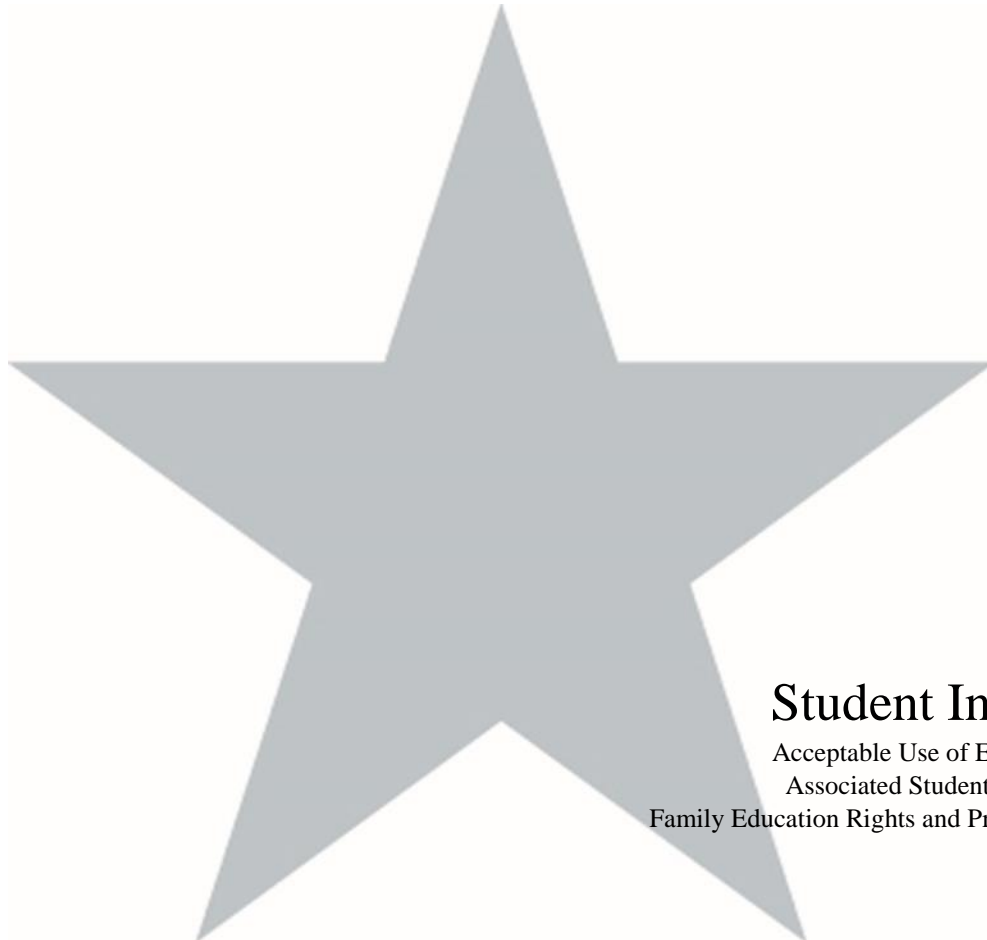
A qualified drug rehabilitation program must include at least two unannounced drug tests and must satisfy at least one of the following requirements:

- Be qualified to receive funds directly or indirectly from a federal, state, or local government program.
- Be qualified to receive payment directly or indirectly from a federally or state-licensed insurance company.
- Be administered or recognized by a federal, state, or local government agency or court.
- Be administered or recognized by a federally or state licensed hospital, health clinic, or medical doctor.

## **Incarcerated Students**

A student is considered to be incarcerated if he/she is serving a criminal sentence in a federal, state, or local penitentiary, prison, jail, reformatory, work farm, or similar correctional institution. A student is not considered to be incarcerated if he/she is in a half-way house or home detention or is sentenced to serve only weekends.

Incarcerated students are not eligible to receive federal student loans but are eligible for federal work-study and federal supplemental educational opportunity grants (FSEOG). They are also eligible for Pell grants if not incarcerated in a federal or state penal institution.



## Student Information

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# Student Information

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## Acceptable Use of Electronic Resources

As an institution of higher education, Helena College endeavors to develop resources and provide services that meet its students' educational needs. It is within this context the College provides students with access to computers, along with access to a wide variety of online material.

Students may find some of the material available online to be inaccurate, incomplete, or outdated; they may find other material sexually explicit or offensive. Helena College does not guide, monitor, or censor students' computer research. The College does, however, restrict the use of computers, computer files, or network resources in the following ways:

1. Students are prohibited from violating copyright laws and from engaging in theft or file theft with regard to College computers.
  - a. Students may not use College computers to violate others' privacy, to harass or intimidate others, to send abusive or patently offensive and unwanted material to others, or to interfere with the work of others. As students' distribute or make material available to others, they need to be aware of others sensitivities toward information or graphics that may seem offensive.
  - b. Students may not deliberately crash, or otherwise impair workstations or computer systems at the College, modify files without authorization, damage files, alter data, introduce viruses, penetrate or harm operating systems, resell bandwidth, or engage in any other illegal acts promulgated from or targeting the College's computers.
  - c. Students are prohibited from concealing or misrepresenting their names or affiliations to mask irresponsible, offensive, or illegal behavior.
  - d. Students are prohibited from sharing their Helena College network username and password with other students or family members.

Misuse of computer or network resources may constitute trespass, disruptive behavior, or sexual harassment and will not be tolerated by Helena College. Failure to comply with these guidelines may result in loss of electronic access, expulsion from a course or the College, and/or legal prosecution.

## Associated Students of Helena College

Helena College has an active, dynamic, and involved student organization, Associated Students of Helena College (ASHC). The goals of ASHC are to help provide students with a quality educational environment, provide a forum for student expression, promote the general welfare of the College, and establish student activities. ASHC sponsors social activities throughout the year, including barbecues, student contests and competitions, holiday parties, and

awareness/fundraising events on behalf of various community service organizations. The organization also uses its funds for the promotion of future projects, clubs, and scholarships.

ASHC welcomes student representatives from each academic program and all officially recognized student organizations. Representatives are elected by a student vote during the spring semester. Student representatives serve as the main communication link between ASHC and the student body. Representatives bring student suggestions to the organization and keep students informed student government, various activities, and important campus issues.

## Family Education Rights and Privacy Act (FERPA)

The College interprets and develops procedures for implementation of the Family Educational Rights and Privacy Act (FERPA) of 1974 and Montana Statutes specifically as they apply to Helena College for affording students' certain rights with respect to their education records.

### Definition of a Student Education Record

Education records do not include an instructor's or staff's personal notes on a student which are in the sole possession of the maker, employment records (except work-study records), records created or maintained by a physician, psychiatrist, psychologist, or other recognized professionals, library records, and alumni records.

### Rights Afforded to Students under FERPA

Students have specific rights concerning their education record:

1. The right to inspect and review their education record.
2. The right to request amendment of the student's education records to ensure they are not inaccurate, misleading, or in violation of the students' privacy or other rights.
3. The right to consent to disclosures of personally identifiable information contained in the education records, except to the extent that FERPA authorizes disclosures without consent.
4. The right to file complaints with the Family Policy Compliance Office concerning alleged failures of Helena College to comply with the requirements of FERPA. Written complaints should be directed to:

#### The Family Policy Compliance Office

U.S. Department of Education  
400 Maryland Ave, SW  
Washington, D.C. 20202-5920

[ferpa@ed.gov](mailto:ferpa@ed.gov)



### **Disclosures Made without Student's Consent**

Helena College may disclose student information under the following circumstances in accordance with FERPA:

- To Helena College employees with a legitimate educational interest. Legitimate educational interest is defined as needing the records to carry out employee responsibilities.
- To authorized representatives of the United States Comptroller General, Attorney General, Secretary of Education, or state and local educational authorities.
- In connection with the application or receipt of financial aid when the information is necessary to determine eligibility, amount of the aid, determine the conditions of the aid, and enforce the conditions of the aid.
- To another institution where a student seeks to enroll or is enrolled.
- To state and local juvenile justice systems or their officials.
- To organizations conducting educational studies.
- To contractors, consultants, or volunteers providing the institution services.
- To accrediting organizations carrying out their accrediting functions.
- In compliance with a judicial order or lawfully issued subpoena.
- To appropriate parties in an emergency if the information will help assist in resolving the emergency.
- To victims of an alleged perpetrator of a crime, disciplinary records maintained by colleges concerning the alleged crime.
- In connection with a disciplinary proceeding at the College.
- If designated as directory information (and the student has not opted out).
- Federal and State Data Collection and Use
- As of January 3, 2012, the U.S. Department of Education's FERPA regulations expand the circumstances under which your education records and personally identifiable information (PII) contained in such records — including your Social Security Number, grades, or other private information — may be accessed without your consent. First, the U.S. Comptroller General, the

U.S. Attorney General, the U.S. Secretary of Education, or state and local education authorities ("Federal and State Authorities") may allow access to your records and PII without your consent to any third party designated by a Federal or State Authority to evaluate a federal- or state-supported education program. The evaluation may relate to any program that is "principally engaged in the provision of education," such as early childhood education and job training, as well as any program that is administered by an

education agency or institution. Second, Federal and State Authorities may allow access to your education records and PII without your consent to researchers performing certain types of studies, in certain cases even when we object to or do not request such research. Federal and State Authorities must obtain certain use-restriction and data security promises from the entities that they authorize to receive your PII, but the Authorities need not maintain direct control over such entities. In addition, in connection with Statewide Longitudinal Data Systems, State Authorities may collect, compile, permanently retain, and share without your consent PII from your education records, and they may track your participation in education and other programs by linking such PII to other personal information about you that they obtain from other Federal or State data sources, including workforce development, unemployment insurance, child welfare, juvenile justice, military service, and migrant student records systems.

### **Disclosure to Parents**

In accordance with Montana Statute §20-25-515 MCA, will not give information to parents unless the student has provided written permission. If students would like to provide access to their parents, they must sign a Release of Information form available from the Executive Director of Enrollment Office.

### **Disclosure of Records to Students**

Helena College requires students to present picture identification for all transactions. Any student wishing to receive information over the phone must complete a Release of Information form with the Executive Director of Enrollment Office. Students will be required to know a password and student identification number to receive information over the phone.

### **Disclosure to Potential Employers**

Helena College discloses graduation dates and dates of attendance as part of its directory information. Students interested in a specific job reference from a faculty member, including performance in courses, must complete the Student Release for Job Referral/Reference form with the appropriate faculty member.

### **Access to Records**

Students may access their records by providing a written request to the office where the records are held. The office will make arrangements to provide access to the records within 45 days of the request. Students may not have access to the following records:

- Financial information submitted by parents.
- Confidential letters and statements of recommendation, which the student has waived the right to review.
- Education records containing information about another student; however, the student will have

access to the record section(s) that concern the student requesting the information.

### **Directory Information**

Helena College has defined the following as directory information and may release it to the public without notifying the student:

- Name
- Address
- Telephone number
- Date and place of birth
- Major field of study
- Enrollment status (full-time, part-time)
- Participation in officially recognized activities
- Dates of attendance
- Degrees and academic offers (e.g. dean's list, honor roll, graduation honors)
- Most recent educational agency/institution attended
- College assigned student email address
- Photographic, video, or electronic images

Students may request directory information not be released without consent. Requests for non-disclosure must be made through the Executive Director of Enrollment Office, and in effect the date the student makes the request; it will only be revoked if the student requests so in writing. Students should be aware if they choose this option, Helena College will not provide enrollment or graduation verifications without the student's written consent.

### **Fees for Copies of Records**

There is a \$3 fee for each official academic transcript. A copy of all other records is provided free of charge.

### **Right of Helena College to Refuse Copies of Records**

Helena College reserves the right to refuse students copies of their student records, including their transcript, if the student has an outstanding financial obligation to the College or an unresolved disciplinary action.

### **Compliance**

Students should address questions, concerns, or problems concerning this policy to the Executive Director of Enrollment Office, Donaldson Campus, 1115 North Roberts, Helena, MT 59601.

### **Bookstore**

The Helena College Bookstore is located on the Donaldson Campus and provides textbooks, supplies, apparel, hot food, beverages, and snacks Monday through Friday during the academic year. The Bookstore accepts cash, credit cards (with the exception of American Express), and checks made payable to Helena College for the amount of purchase only. The Bookstore also features a full service Coffee Counter with a wide selection of hot and cold drinks. Bookstore East is located on the Airport Campus and also sells supplies, food, snacks, and beverages Monday through Friday during the academic year.

### **Health Insurance**

Students enrolled in six or more credits each semester may select to purchase medical insurance while attending Helena College. Through the Montana University System Student Insurance Plan (MUSSIP) students may purchase coverage from Blue Cross Blue Shield of Montana (BCBSMT). The insurance plan provides major medical and prescription coverage including but not limited to hospitalizations, outpatient surgery, and emergency services. The plan does not cover vision or dental. High school students participating in dual enrollment programs are not eligible for the insurance plan.

The student insurance plan is elected or waived during electronic registration for both the fall and spring semesters and must be purchased by the 15th day of instruction for the coverage term. If selected, medical coverage begins the first day of the semester provided payment is made as required within the enrollment period. Students who elect coverage and withdraw before the 15th day of instruction will receive a full refund of the premium cost if it has not been used. There are no refunds after the 15th day of instruction. Students wishing to enroll in the student insurance plan after the 15th class day may do so furnishing documentation of a major life event (loss of insurance, loss of employment, etc.). In such cases, the premium will not be prorated and the cost will be the same as the beginning of the semester. Plan coverage and premium costs are published each academic year in the MUSSIP campus brochure and on the Helena College website. For more information, visit [www.HelenaCollege.edu](http://www.HelenaCollege.edu), or contact the Executive Director of Enrollment, 406-447-6908.

### **Housing Resources**

Helena College is a non-residential campus. Apartment rentals in the Helena area average \$600 – \$1,000 per one/two-bedroom apartment. The College's housing brochure offers tips on finding housing as well as helpful contact information for newspapers, apartment finders, housing complexes, and child care. A housing bulletin board is maintained in the Welcome Center at the Donaldson Campus. Students are encouraged to consult the classified advertising section of the Helena Independent Record, [www.helenair.com](http://www.helenair.com).

### **Library Learning Hub**

The mission of the Helena College Learning Hub is to enable student success in the programs and degrees offered at the College. Professional librarians, along with an Academic Coach and Tutor Coordinator, will achieve this mission by collaborating with the Helena College community, and the Montana library community, in the selection, purchase, and creation of information resources and services; and by providing coaching, tutoring, and information literacy instruction targeted to the curriculum. In addition, the library exists as a quiet place of study and inquiry, fostering the concepts of lifelong learning, intellectual freedom, and cultural enrichment.

### **Library**

The library has a location on each campus. The main library is located in Room 140 on the Donaldson Campus. The

Airport Campus library is located in the southwest corner of the building and can be accessed through the back hallway. These combined locations house over 10,000 print book titles, two daily print newspapers, more than 80 print magazines and journals reflecting the diversity of programs at the College, and 16 iPads, 28 laptops and 10 hotspots for student use. The OneSearch search box on the library homepage allows users to place requests on books and DVDs from sixteen academic libraries across the state participating in the Treasure State Academic Library Services (TRAILS) consortium. The library also provides access to materials internationally through interlibrary loan. The library [website](#) provides full-text online access to articles from periodicals (magazines, journals, and newspapers), reference sources, and scholarly e-books, as well as e-books and digital audiobooks for leisure reading. All electronic resources are available both on and off campus. The library also provides computers for public use, group and quiet study areas, a multi-function photocopier/printer/scanner, and a color printer. A professional library staff member is available during open hours for individual assistance or group instruction.

### **Tutoring and Academic Coaching**

Individualized tutoring is free for Helena College students and is available for most courses. For more information, [contact](#) the Library Learning Hub or log into your Starfish account to make an appointment with a tutor. For courses not covered, or for students needing help outside of the hours offered, online tutoring is available through TutorMe; you will find TutorMe in Moodle. Academic coaching is available to all students to help them develop the skills they need to achieve their goals by providing individual support in the areas of time management and study skills. Appointments may be made through your Success Network in Starfish. Tutoring services and academic coaching are located in room 139 of the Library Learning Hub on the Donaldson Campus.

### **Montana Campus Compact**

Helena College is a member in good standing of The Montana Campus Compact. Through this affiliation, Helena College has shown its commitment to civic engagement by students, faculty, and staff.

The Montana Campus Compact is a coalition of college and university presidents, chancellors, and deans committed to fostering the quality values and skill sets of citizenship in Montana students through active involvement in civic engagement activities. To meet this goal, The Montana Campus Compact works to:

- Offer student scholarships, faculty grants, and resources to member campuses to support civic engagement activities;
- Organize conferences, forums, and workshops to develop civic engagement initiatives;
- Foster partnerships between campus, business, community, and government leaders;

- Provide timely research and service related to its member campuses; [and](#)
- Assist in state legislation promoting public and community service.

Students interested in learning more about Campus Compact opportunities at Helena College should contact the Career Connections Coordinator at 406-447-6903.

### **Parking**

Permits are required on all Helena College parking properties. Permits are obtained by application from the Cashier's Office at the Donaldson campus and at the Airport campus bookstore for a \$15 fee and are valid for each academic year. Authorized temporary permits, good for one day, are available from the Helena College Welcome Center. Parking permits must be clearly displayed and visible from the outside of the vehicle. Citations for unpermitted vehicles or vehicles parked in a hazardous manner are \$10. Please review the parking application for all parking requirements. In the event a vehicle is towed, the owner will be responsible for all associated fees. Penalties for violation of handicapped parking laws will be applied to the fullest extent of the law.

### **Handicapped Parking**

All Helena College students and employees who park in handicapped parking on Helena College property must purchase a Helena College parking permit for the academic year. Parking permits are \$15 and may be purchased from the Cashier's Office on the Donaldson campus.

It is against the law to use anyone else's handicapped parking permit. This law also applies to disabled veteran plates. If you park illegally in any part of handicapped parking stalls or ramps, you will be ticketed appropriately. Repeat offenders may have their vehicle impounded and be responsible for recovery expenses.

If you believe someone is parked illegally in a handicapped parking space, please contact the Administrative Associate to Enrollment Services 406-447-6900 or Director of Facilities 406-447-6936.

### **Personal Property Responsibility**

Each student is responsible for his or her own personal property brought on campus, and students are encouraged to provide adequate security for their possessions. Any theft or damage to personal property should be reported to campus maintenance or the Welcome Center on the Donaldson Campus.

### **Student Handbook**

The Helena College Student Handbook is intended to provide students with basic information about services as well as policies and procedures related to student rights, responsibilities, and conduct as members of the campus community. The handbook is published each academic year and includes a weekly calendar planner. Student handbooks

can be obtained during orientation programs or from the Welcome Center, the East End Advising, or either college bookstores. They are also available online, [www.HelenaCollege.edu](http://www.HelenaCollege.edu).

### **Student Information Change**

Students may change their address and phone number through the online student information system “MyHC” on the Helena College website. Students may also make the change by completing a Name and Address form available from the Executive Director of Enrollment Office.

### **Student Name Change**

A student who needs to update their name must present valid proof of the name change and be presented at the time the form is completed. Examples of proof include a marriage certificate or an updated Social Security Card.

### **Student Records & Transcripts**

Student records are only released with a written request from the student. The request must include the student’s signature, dates of attendance, student ID or SSN, and information on where the transcript should be sent. There is a \$3 fee for official transcripts. Requests for transcripts may be sent to Helena College with a check, money order, or credit card, to:

**Executive Director of Enrollment Office**  
1115 North Roberts Street  
Helena, MT 59601

Transcripts may also be ordered online through the Helena College website, [www.HelenaCollege.edu](http://www.HelenaCollege.edu).

Students attending Helena College after 2000 may access their unofficial transcripts through their “MyHC” web page by logging into their Student Login and selecting the “MyHC” link.

Transcripts/Diplomas are withheld if a student owes a debt to the College, has not completed Loan Exit Counseling, or has outstanding disciplinary action.

### **Student Code of Conduct**

The Student Conduct Code embodies the ideals of academic integrity, honesty, and responsible citizenship. It governs all academic work and student behavior at Helena College. The principles and policies that make up the Code set forth the standards of acceptable student conduct, disciplinary sanctions, and procedures to be followed in adjudicating charges of both academic and non-academic misconduct. For information regarding student rights and responsibilities, conduct code, and due process, please refer to the current Helena College Student Handbook or contact the Executive Director of Compliance and Financial Aid, 406-447-6913.

## **Student Support Services**

### **Advising**

The Advising service is located on the Donaldson Campus in Room 119 and 139, and provides academic and personal support to promote student success while attending college. Academic advising includes initial and ongoing academic advising, transfer information, and academic success strategies. For appointments or services offered in Advising, students can call 406-447-6911.

### **Career Services**

Career Services helps students gain skills and information to secure employment. The Career Services provides workshops and individual counseling assisting students with exploring career choices, resume writing, and interviewing. Students interested in obtaining assistance with employment should contact Career Services at 406-447-6952. More information can be found on the Career Services page of the College’s website: [http://www.HelenaCollege.edu/student\\_support\\_center/career\\_services/default.aspx](http://www.HelenaCollege.edu/student_support_center/career_services/default.aspx).

### **Counseling**

Short-term personal support is available to students who are experiencing difficulties that may be interfering with their educational progress. The emphasis is on clarifying choices, handling difficult situations, and accessing community resources. Appointments with a licensed counselor can be made by contacting our case manager, Deb Micu at 406-447-6962 or at <mailto:debbie.micu@helenacollege.edu> or Google Voice at 406-662-1949.

### **Wellness Coach**

Helena college wellness is about helping you reach your full potential by becoming aware of the interconnections of all aspects of your life through a positive and proactive process of self-exploration. Through a collaborative process, our counselors and case manager help you overcome obstacles you may encounter in your life, turn your challenges into victories and celebrate your successes! The resident wellness case manager, Deb Micu is available to assist in providing on-sight and community resources suited to your specific individual or group needs as students at Helena College. She works to help you identify effective problem solving by identifying solutions.

### **Wellness Case Manager 406-447-6962**

### **Disability Resources**

Services for students with disabilities are provided at Helena College under the guidelines of Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990 as amended in 2008. Access to the College’s programs and facilities is provided for all qualified students and discrimination based on disability against any student is specifically prohibited under these laws. Services are located on the Donaldson Campus, Room 139. Students are encouraged to contact the Coordinator of Disability Resources as early as possible for reasonable accommodations. It is the student’s choice to disclose any disability and their responsibility to request accommodations each term. Certain persons with disabilities may qualify for educational assistance through Montana Vocational Rehabilitation and should contact that office at 406-444-1710 for

more information. All documentation related to the student's disability is kept in separate and confidential files in the Office of Disability Resources, although it is still part of the student's educational record. More information can be found on the Disability Resources page of the College's website: <http://www.HelenaCollege.edu/disability/default.aspx>. Students may also want to call 406-447-6952 for information.

### **Higher Education Assistance (HEA) and Tribal Grants**

Native American students may be eligible for need-based grants from the HEA or the student's tribe. For more information, students should contact the Tribal Educational Specialist, the Financial Aid Office on the Donaldson campus.

*Note: All benefit information must be reported to the Financial Aid Office.*

### **Helena College American Indian Student Mentor Program**

The Helena College Native American Scholars Program is designed to create a peer-mentoring program to incoming Native American students to promote a welcoming environment, as well as increase academic engagement and achievements. This program provides a seamless transition into college for Native American students needing and seeking support. The program assists students to become academically and personally successful at Helena College and beyond. Mentors will greet the new college students at the very start of their educational career and assist with course selection, improving study skills to promote retention and success in college as well as life skills. Students will receive a \$100 book stipend if selected for this program.

### **Student Computer Requirement**

Student ownership of and/or permanent access to a computing device is required at Helena College. Students benefit greatly from the ability to work and access online information and services at any time and from any place. For specific program requirements and additional information, please visit the Helena College website. <http://www.helenacollege.edu/it/comprecommendations.aspx>

### **Veterans Education Benefits**

Veteran Resources, located on the Donaldson Campus in Room 119, serves as a liaison for students receiving benefits, the College, and the Veteran's Administration.

- Applications for Veteran benefits are obtained online at [www.vets.gov](http://www.vets.gov).
- A Montana University System Veterans fee waiver is available for veterans who have exhausted their chapter benefits.
- The Veteran's Mentoring Program is a peer program for veterans and veteran dependents providing assistance for incoming students transitioning to college.
- Free counseling services are provided by a Licensed Clinical Professional Counselor well-versed with trauma, PTSD, anxiety, and family issues. Family members are invited to participate in the counseling.
- Helena College complies with the requirements of 38 U.S.C, section 3679, which allows any individual who is entitled to educational assistance under Chapter 31, Vocational Rehabilitation and Employment, or Chapter 33, Post-9/11 G.I. Bill benefits, to attend or participate in the course of education while awaiting payment from the VA if they provide the college with a "Certificate of Eligibility" no later than the first day of a course of education. Such certificate can include a "Statement of Benefits" obtained from the Department of Veterans Affairs' (VA) website – eBenefits, or a VAF 28-1905 form for Chapter 31. Helena College will not impose any penalty, including the assessment of late fees, the denial of access to classes, libraries, or other institutional facilities, or the requirement that a covered individual borrow additional funds, on any covered individual because of the individual's inability to meet his or her financial obligations to the institution due to the delayed disbursement funding from VA under Chapter 31 or 33. This policy remains in effect until the date on which payment from the VA is made to the institution.

The Veteran Resources contact is the Director of Admission. Call 406-447-6908. More information can be found at <http://www.HelenaCollege.edu/veteran>.



## Academic Information

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Grade Appeal Process  
Graduation  
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Pass / No Pass  
Repeating a Course  
Scholastic Requirements  
Withdrawal

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# Academic Information

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## Student Responsibility Statement

*All students at Helena College are responsible for knowing and understanding the requirements of their individual degree programs, and must take final responsibility for making their own academic decisions.*

### Academic Forgiveness

A Helena College student seeking his or her first undergraduate degree who returns to the College after a minimum three-year absence and has not attended any other college or university is eligible for Academic Forgiveness.

Academic Forgiveness allows a student who has met the requirements in the previous statement to return to Helena College and continue the pursuit of a degree or certificate without penalty from previous poor academic performance.

Receiving Academic Forgiveness for previous semesters results in all credits and grades, up to two semesters, being forgiven and excluded from the student's GPA calculation; semesters do not need to be consecutive. A student will not be allowed to select specific grades and credits to be retained while excluding others earned. The excluded courses and grades will remain on the student's official College transcript; however, they may not be used to fulfill any program or college requirements.

A student will be granted Academic Forgiveness only one time during his or her academic career with Helena College.

Only Helena College grades and credits will be excluded; any transfer courses previously applied to the student's transcript will remain.

Any student who receives Academic Forgiveness will be bound by the College Catalog in effect at the time of the return to Helena College or any subsequent catalog in accordance with College policy.

A student applying for Academic Forgiveness will be required to pass a minimum of 75% of registered courses after applying for forgiveness and be in good academic standing upon completion of the term before Academic Forgiveness will be granted.

For example, if the student is registered for 12 credits in the fall term after having sat out for the minimum three years, the student must successfully complete 9 credits with a minimum term GPA of 2.0. After such, then and only then will the application for Academic Forgiveness be reviewed.

A student wishing to apply for Academic Forgiveness should contact the Executive Director of Enrollment Office for the appropriate form. The Executive Director of Enrollment Office will be responsible for verifying eligibility and after review by the appropriate offices, will notifying the student of the decision.

### Procedure:

1. Provide a written statement that outlines the nature of your request for Academic Forgiveness and the reasons you believe your appeal merits approval.
2. Submit a letter(s) of support from an academic administrator, faculty member, advisor, or other College professional who is familiar with your situation. If the extenuating circumstance involves medical reasons, it is not necessary for the letter(s) of support to contain details of the medical condition.
3. Submit the completed form and required documentation to Executive Director of Enrollment for approval.
4. If approved, the form and documentation will be forwarded to the Executive Director of Enrollment for completion of the process. Academic Forgiveness will result in all credits and grades earned during the semester in question being excluded from the student's GPA calculation; a student will not be allowed to select specific courses or credits for exclusion. The excluded courses and original grades earned will remain listed on the transcript; however, they may not be used to fulfill any Helena College requirements toward attainment of a credential or degree.

### Academic Integrity

Helena College expects its students to adhere to a high standard of academic integrity. It is a violation of academic integrity standards and the student code of conduct to present the ideas, designs, works, or words of another person as one's own efforts, or to permit another person to do so. The following guidelines are intended to clarify these issues for students, faculty, and administration.

The College will regard the following acts as violations of academic integrity constituting academic dishonesty. Although the list and descriptions are not intended to be exhaustive of all types or instances of academic dishonesty, they are presented as examples of behavior to avoid. It is explicitly the student's responsibility to avoid academic dishonesty of all kinds, and each student is required to seek guidance in advance of taking any questionable action, including but not limited to those enumerated, below.

**Plagiarism:** A student will be considered in violation of standards for academic integrity if they submit an assignment in any form (written, oral, graphic, or computer-generated, etc.) which consists wholly or partially of the words, work, or ideas of another individual without giving the original author proper credit. A similar violation would occur in cases where a student submits a paper or other project/assignment for one course that was originally created



for another course even if that student was the originator of the paper/project/assignment in the first instance. Similarly, using facts, figures, graphs, charts or information without acknowledging the source constitutes plagiarism, which may occur verbally, in written form, through computer programs and files, research methods, designs, particular distinctive words or phrases, ideas and images or any other information that was created by another person without acknowledgement of that person's role in its creation. Inadvertent or unintentional misuse or appropriation of another's work (such as relying heavily on source material that is not expressly acknowledged) is still considered plagiarism.

**Copying/Cheating:** A student will be considered in violation of academic integrity standards if they gain, or attempts to gain, credit for work by dishonest or deceptive means. Examples include the use of crib notes, cheat sheets, books, or any other material or electronic device as aids in an examination or any other graded exercise, unless the instructor of the class has given explicit permission to use such materials. Collaboration with another student on an examination or other graded exercise, unless the instructor has given permission, also constitutes copying. It is the policy of the College to prohibit phones, smart watches, and other similar devices during examinations. Prior to administering an examination, instructors will require all such devices are turned off and stored in an inaccessible place. Failure to comply with this policy will constitute a violation of the academic integrity policy. If a student is found in possession of such a device during an examination, they will be assigned a score of 0 for the examination. Further examples include: copying assignments from another source (classmate, etc.); working with others on exams or homework that is not explicitly permitted by the instructor to be collaborative; looking at another student's paper or screen during an exam or assignment; disclosing exam content to others during an exam, or after completion of an exam, including allowing such information to be disclosed to you; and/or attempting to or allowing another person to complete assignments for another person (such as in an online course). The above examples are meant to illustrate violations of the principle of academic integrity, and are not intended to be all-inclusive. Additional instances of dishonesty that are not explicitly identified in the above list will nevertheless be treated as violations.

**Contributing to Academic Dishonesty:** A student will be considered in violation of academic integrity standards if they willfully assist another student in an act of academic dishonesty.

Academic dishonesty will not be tolerated. Academic sanctions for a first violation are at the discretion of the instructor and range from a failing grade for the particular assignment to a failing grade in the course in which the academic dishonesty occurs. When a faculty member assigns

a failing grade on the basis of academic dishonesty, they shall notify the affected student(s), the appropriate unit administrator (Director or Division Director), as well as the Executive Director of Compliance and Financial Aid of the violation and provide any and all supporting documentation to the Executive Director of Compliance and Financial Aid. Record of the infraction will be kept on file in the office of the Executive Director of Compliance and Financial Aid, although no further official action will be taken unless/until a second infraction is reported. In cases of repeated offenses, the Executive Director of Compliance and Financial Aid will administer a range of disciplinary sanctions up to and including expulsion from the College. Students retain their right to due process and may refer to the Student Handbook or the Executive Director of Compliance and Financial Aid regarding any disciplinary sanctions.

### **Class Attendance & Absence**

Students are expected to attend all class meetings and complete all assignments for courses in which they are enrolled. Instructors may excuse brief and occasional absences for reasons of illness, injury, family emergency, religious observance, or participation in a College-sponsored activity. (College-sponsored activities may include required course field trips, ASHC service, or other institutionally supported service.)

Instructors must excuse absences for the following reasons: military service, mandatory public service (court appearance, jury duty), emergency medical attention of self or immediate family member, and/or death of immediate family member. To petition for an excused absence, the student must contact the instructor of the course and the Division Director(s) responsible for the applicable course(s) as soon as possible, but no more than 5 days following the absence. Contact information for Division Director can be found on course syllabi. Each request will be handled on a case-by-case basis using all available information and documentation to make an informed decision. Part of this determination will be based on whether or not the student can successfully complete the course following the absence. In some cases, class and/or discipline requirements may preclude the possibility of successful completion of the course. Course requirements including assignments, lab work, quizzes, and exams cannot be removed; however, when appropriate, extensions to due dates may be granted. If the student does not agree with the determination of the Division Director, they may appeal to the Dean/CEO.

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

## Students Called to Active Duty

If a student is ordered to active duty while enrolled in one or more courses at an educational institution, the faculty shall, when consistent with accreditation requirements:

- a. assign a final passing grade in the course if, in the faculty's judgment, enough of the course requirements have been completed;
- b. assign a military incomplete in the course and extend the period of time in which the student may complete course requirements; or
- c. allow the student to withdraw from the course, backdating out of the term, and all tuition/fees paid will be reimbursed to the entity that paid it (noting there may be Financial Aid implications), and no grades (including "W's") will be recorded.

If a student re-enrolls in one or more courses at an educational institution within 12 months after returning from the active duty that interrupted the student's previous enrollment at the institution, the student must, to the extent possible, be readmitted with the same academic status that the student had when ordered to active duty, unless the student requests or agrees to admission with a different academic status.

Please fill out a specialized "Students Called to Active Duty" form for the above situations.

## Audit

With the consent of the instructor, a student may enroll in a course for no credit (audit). Auditing students pay the same fee as students enrolled for credit. Auditors are not expected to complete course work as students who are enrolled for credit, nor will they take tests. Audit enrollments will not count toward financial aid or degree completion requirements. Students must inform the Executive Director of Enrollment Office within the first 15 instructional days of the course.

## Challenging a Course for Credit / Prior Learning Assessment

A student who has completed course work through prior learning or non-accredited learning experiences has the option of earning college credit by taking a challenge exam for designated courses. It is important to note that not all courses can be challenged. An instructor will determine if the student's previous course work and/or experience supports the challenge request. The request must be approved by the Division Director and then validated through the Executive Director of Enrollment Office. The exam must be completed with passage of at least 80% of the exam contents (written, oral, and/or hands-on content) in order to receive credit for the course. A grade of "CH" will be placed on the student's transcripts with successful completion of the examination. The grade received for the challenge does not affect the student's GPA. A fee will be charged for the challenge exam in accordance with Board of Regents policy. Challenged credits will not count towards financial aid. A student cannot

challenge more than 25% of the credits required for his or her degree.

## Course Substitutions

Students are required to complete all program courses in order to be awarded their degree or certificate. Helena College does allow course substitutions when there is a compelling reason to do so. A course substitution must uphold the integrity of the degree. For more information on the procedure for substituting a course, students should see the Executive Director of Enrollment Office or their faculty advisor.

## Dean's List

To qualify for the Dean's List, the student must earn a semester GPA of 3.5 or higher while earning 12 or more semester credits. (P/NP and developmental class credits are not included as earned credits for purposes of determining Dean's List standing.) Grades of "D," "F," or "NP" are not allowed. The student will receive written notification of the offer, and it will appear on his/her transcript for that term.

## Add / Drop Classes

Students registered for fall or spring semesters and attending classes may add classes through the first 8 instructional days of the semester, which can be done online for the first three days. Instructor approval, add form, and a \$10 processing fee are required to add classes on days 4 through 8. Students may drop a class without record through MyHC during the first 15 business days of the semester. After the online add/drop window has passed, a drop form must be completed and returned to the cashier along with a \$10 processing fee. If a student drops a class AFTER the first 15 days and prior to three weeks before the end of the course, a "W" (withdraw) will be given. Students cannot drop a class during the last three weeks of the semester and will receive a letter grade from the instructor based on coursework completed. Drop forms are not used to withdraw completely from the College. Adds/drops for summer semester courses and shorter terms are computed on the same ratio stated above for hours attended to total course hours; the registration guide outlines summer and shorter term deadlines.

## Evening / Saturday Classes

A variety of late afternoon and evening classes are offered based upon the needs of the community and Helena College students. These classes are available after 5 p.m. Monday through Thursday and 9 a.m. to 4 p.m. on Saturdays. Applicants interested in classes may contact the Helena College Welcome Center.

**\*\*Updated 3/30/2020**

## Grades & Grade Point Averages

Student evaluation is reported at the end of each semester. Students may access their final grades online through “MyHC.” A student’s level of academic performance is determined through the calculation of a grade point average (GPA). The grade-point average is determined by dividing total grade points earned by the number of credits carried. Students may access their grades and GPA through “MyHC” on the Helena College website. The meaning of each grade and its value in grade points is as follows:

Grade	Quality of Work	Grade Points
A	Excellent	4.00
A-		3.67
B+		3.33
B	Above Average	3.00
B-		2.67
C+		2.33
C	Average	2.00*
C-		1.67*
D+		1.33
D	Passing	1.00
D-		0.67
F	Failing	0
FR	Failing / Remedial	0
NF	Never Attended	0
AUD	Audit	N/A
EC	Credit by Exam (AP/CLEP)	N/A
I	Incomplete	N/A
MG	Missing Grade	N/A
NP	No Pass	N/A
CH	Challenge/Pass	N/A
P	Pass	N/A
R	Following a Traditional Grade	N/A*
TP	Tech Prep	N/A
TR	Transfer Course	N/A
R	Retake	N/A
SL	Service Learning	N/A
W	Withdraw	N/A

\*An “R” following a traditional grade is used for courses numbered below 100 level. These courses are not counted in the GPA.

### In order to graduate, students must:

1. Earn a minimum grade of “C-” in each class used to meet the prerequisites or program requirements and
2. Maintain either:
  - a minimum 2.00 cumulative GPA (for students seeking Associate of Applied Science Degrees) or
  - a minimum 2.25 GPA (for students seeking Associates of Arts or Associate of Science Degrees) or
  - a minimum 2.5 GPA (for students seeking an Associate of Applied Science or an Associate of Science in Nursing)

## Grade Appeal Process

### Final Course Grade Appeal

Every student has the right to appeal the final grade in a course, in accordance with the stipulations outlined below. Such an appeal must be initiated by the student or the student’s agent/representative, who has been identified in writing, no later than commencement of the subsequent semester. Spring grades will normally be appealed in the following fall semester. The initiating student should begin with the INFORMAL process outlined in Section A and then may pursue the FORMAL process in Section B if satisfaction is not obtained informally. Once a formal appeal has been initiated, the process will conclude within two weeks whenever possible.

### SECTION A

#### Student initiated INFORMAL Process

1. Discuss the matter with his/her instructor. Clerical errors are usually handled in this manner, with the instructor signing the correction of official records. If the student believes the problem is not resolved, the student shall then.
2. Meet with the Division Director who supervises faculty teaching the course to discuss the issue. If the concern still remains unresolved, the student may:
3. Elect to file a formal written Grade Appeal with the Associate Dean of Academic & Student Affairs. The Associate Dean records the official filing of the appeal and then refers it to the Peer Review Committee. A formal Grade Appeal may not be filed until steps 1 and 2 above have been completed. It is recommended that students present documentation that may shed light on the appeal.

### SECTION B

#### FORMAL Process

Conditions under which grade may be appealed:

1. If there is a dispute over the numerical calculation of the grade, or
2. If the grade assigned appears arbitrary or capricious or inconsistent with syllabus assessment/grading policy.

#### Faculty Peer Review Committee

Upon receipt of a student’s written Grade Appeal, the Executive Director of Enrollment shall then convene a hearing of the Peer Review Committee. The committee will be formed ad hoc and consist of:

1. A division chairperson from OUTSIDE of the division where the course is offered. This chairperson is non-voting and serves only to facilitate the process.
2. Four faculty members who shall be selected by the Executive Director of Enrollment, with two from the Airport Campus and two from the Donaldson Campus.

3. The student who has filed the appeal must be in attendance or else waive his/her right to attend the meeting in writing prior to its being scheduled.
4. The involved faculty member may attend or send written comments at her/his discretion.
5. The institutional Executive Director of Enrollment may be invited to provide information or as a committee resource.

The purpose of the Peer Review Committee is to determine whether or not the grade should be changed. If the Peer Review Committee finds that the grade assigned was miscalculated, or appears arbitrary or capricious or inconsistent with syllabus and assessment/grading policy, the Committee shall make a recommendation as to the appropriate grade to the Executive Director of Enrollment who will have final decision authority.

### Assignment Grade Dispute

Every student has the right to appeal a grade while the course is in progress, in accordance with the stipulations outlined below. Such an appeal must be initiated by the student no later than TEN working days after the assignment grade in question is delivered or posted. It is important to note there is NO FORMAL PROCESS for appealing a grade while the course is in progress.

## SECTION A

### Student initiated INFORMAL Process

1. Discuss the matter with his/her instructor. Clerical errors are usually handled in this manner, with the instructor signing the correction of official records. If the student believes the problem is not resolved, the student shall then;
2. Visit with the division director who supervises faculty teaching the course to discuss the issue. If the concern still remains unresolved, the student must wait to;
3. File a formal written Grade Appeal with the Executive Director of Enrollment according to the process outlined above AFTER the final grade for the course has been posted. It is recommended that students present documentation that may shed light on the appeal.

### Graduation

In accordance with Montana Board of Regents Policy 301.5.3, students must earn a “C-” or higher in all classes that are used to satisfy the requirements for a certificate or degree. Students must also have a 2.00 GPA, unless otherwise specified by their program.

In the semester before a student plans to graduate, a student must meet with his or her advisor and submit an Application for Certificate or Degree to the Executive Director of Enrollment Office. The Executive Director of Enrollment has final authority on the approval of graduation applications.

Students neglecting to submit an Application for Certificate or Degree will not be awarded a certificate or degree. Any student applying for a certificate or degree must pay a fee. If applying for more than one certificate or degree, a fee is required for each application. Certificates and diplomas will be withheld if a student owes a debt to the College.

Students will be awarded a certificate or degree upon satisfactory completion of the program requirements. One third of the coursework required for the degree must be completed at Helena College.

A graduation ceremony is held every May. Fall and spring graduates of the corresponding year are invited to attend the ceremony. Summer graduates may attend the spring graduation ceremony as well. Caps and gowns are available through the Bookstore.

### Catalog Governing Graduation Requirements

The catalog governing students’ graduation requirements is the Helena College catalog in effect at the time of initial enrollment as a degree-seeking student, as long as the student has been continually enrolled. A student may elect to graduate from any subsequent catalog. If a student is absent for two or more semesters, the catalog in effect at the time of readmission governs the student’s graduation requirements. Students must complete all program requirements within six years of enrolling. Students who have not completed requirements in six years will be advised into the catalog in use at the time of graduation.

In case of changes in the student’s program, Helena College reserves the right to determine appropriate substitutions. If a program is eliminated, Helena College will determine an appropriate phase-out process for current students.

### Graduation Honors

Eligibility for academic honors is based upon the student’s cumulative GPA at the end of the semester prior to commencement for announcement purposes. The final and official honors distinction will be made after all grades have been submitted and calculated by the Exec. Director of Enrollment. The official honors distinction will be stated on official transcripts. The honors classifications are identified below:

4.00	Summa Cum Laude
3.80 – 3.99	Magna Cum Laude
3.50 – 3.799	Cum Laude

### Incomplete

An incomplete (“I”) grade may be given with the approval of the Executive Director of Enrollment Office when, in the opinion of the instructor, there is a reasonable probability that students can complete the course without retaking it and without instructor participation. The incomplete grade is not an option to be exercised at the discretion of the student and is given only in cases of extreme personal hardship or unusual academic situations.

Eligibility for an incomplete is determined within the following guidelines:

1. An incomplete may be assigned to a student when he/she has been in attendance and doing passing work up to three weeks before the end of the course, and, for reasons beyond his or her control, or he/she has been unable to complete the requirements on time. Negligence, indifference, or excessive absences are not acceptable reasons.
2. The instructor will set the conditions for completion of the coursework. When these conditions have been met, the instructor will assign a grade based upon an evaluation of the total work done by the student in the course.
3. An incomplete (“I”) which is not made up during the next regularly scheduled semester will automatically convert to a grade of “F.”

### **Outdated Coursework**

In accordance with Board of Regents Policy 301.5.2, Helena College uses the following guidelines for evaluating previous coursework taken at Helena College:

- Courses specific to a program of study are guaranteed for evaluation for five years.
- Courses used for general education requirements are guaranteed for evaluation for 15 years.
- Courses used for elective credits are guaranteed for evaluation for 15 years.

Coursework that falls outside of the stated periods is not guaranteed for evaluation/graduation. It is the discretion of the individual program to review coursework older than the above guidelines. Students who have outdated coursework are encouraged to speak with their faculty advisor.

### **Pass / No Pass**

**Student Option:** Students who enroll in courses for which their preparedness is in question may enroll in certain courses on a pass/no pass basis at the discretion of the instructor.

No more than six pass/no pass credits may be counted toward program completion. The pass/no pass option does not extend to courses required by the student’s program or program option, except at the discretion of the departments concerned. Courses numbered below 100 are not calculated in the pass/no pass limit or toward program completion.

The grades of pass/no pass are not formally defined in terms of their relationship to the traditional grades of A, B, C, D, and F; a “P” is given for work considered to be passing and therefore deserving credit, and an “NP” for work not passed. “P” and “NP” grades do not affect grade point average.

Election of the pass/no pass option must be indicated at registration time on the registration form. After registration, but prior to the end of the 15th day of instruction, a student may change the grading option from pass/no pass to

traditional (A – F) grading, or vice versa, by submitting an add/drop form.

The College cautions students that many schools and some employers do not recognize non-traditional grades (i.e., those other than A, B, C, D, and F) or may discriminate against students who use the pass/no pass option.

**Faculty Option:** A department may elect to offer an entire class on a pass/no pass basis. This method of grading is used in courses where more precise grading is inappropriate.

### **Repeating a Course**

Students may retake a course to improve their grade by registering and paying tuition and fees for the course. They must submit a Request to Change Grade for Repeated Courses form to the Executive Director of Enrollment Office upon completion of the course. The letter grade for the repeated course will be posted to the student’s transcript, and the previous grade will be replaced with an “R” to indicate that the course was retaken. A grade of “R” is not calculated into GPA.

A student’s academic standing (Dean’s list, probation, suspension, etc.) cannot be retroactively changed by retaking classes.

### **Scholastic Requirements**

**Academic Probation:** Students will be placed on academic probation, or continued probation, at the end of any term (including summer session) if their cumulative GPA drops below or remains below 2.00.

All students on Academic and Financial Aid probation are required to participate in the Academic Recovery Program. Students failing to meet the conditions of their Academic Recovery Contract during the semester may be suspended.

An “Academic Probation” notation will be posted to a student’s permanent Helena College academic record.

Students placed on academic probation must show satisfactory academic progress – i.e. earn a 2.00 term GPA – during their next term of enrollment (including summer) or face academic suspension. Students who raise their cumulative 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 will be notified of their status in writing within a reasonable time following the end of the term. Notification will explain enrollment limitations and conditions and warn students of consequences if they fail to improve their scholastic performance during future terms of enrollment.

**Academic Suspension:** Students will be academically suspended at the end of any semester if they were placed on academic probation in their last semester of attendance and they failed to earn a term GPA of 2.00.

Students placed on academic suspension status may not enroll at Helena College during the next semester (fall or spring, whichever applies), nor summer session if a student is suspended at the end of spring semester. That is, a student who has been academically suspended from Helena College for the first time must “sit out” one regular semester (plus summer session, if a student is suspended at the end of spring semester).

An “Academic Suspension” notation is posted to a student’s permanent Helena College academic record.

Students who are suspended for academic reasons will be informed of their status in writing as soon as possible following the end of the term. Any/all future enrollments (future class schedules that exist in Helena College’s computer system through pre-registration prior to the end of the term in question) of academically suspended students will be canceled. Written notification of academic suspension will explain options available to the suspended student.

**Readmission Following Suspension:** Students who are suspended for academic reasons must apply for readmission to Helena College. Students who seek readmission after “sitting out” the required suspension period must submit:

1. A properly completed Application form;
2. A letter that acknowledges the reasons the student did poorly and steps taken to improve the student’s ability to perform;

**and**

3. An Application for Reinstatement after Academic Suspension form.

The application and letter will be reviewed by a committee. Students reinstated after suspension will be assigned an advisor and follow a strict academic plan. Reinstatements will not be considered for the summer semester.

## **Withdrawal**

Withdrawal from the College is the student’s responsibility. In order to withdraw from all classes, a student must meet with a representative from the Advising & Career Center and complete the withdrawal form. The form must be completed, signed by the student, and collected by the Advising & Career Center. If a student withdraws from the College after the first 15 instructional days and prior to three weeks before the end of the course, a “W” (withdraw) will be assigned. During the last three weeks of the semester, a student may not officially withdraw and will receive a letter grade from the instructor based on an evaluation of the total work done by the student in the course. Withdrawal from a course in which the student has received an “FX” for academic dishonesty is not permitted. It is important to note that a complete withdrawal cannot be done online, but can be done via the telephone.

## **Retroactive Withdrawal**

After a term has ended, a student who left the College for extenuating circumstances without an official withdrawal during the term of departure may apply for a Retroactive Withdrawal. The student must present supporting documentation that demonstrates serious and compelling reasons justifying the withdrawal and extenuating circumstances justifying its retroactive nature; poor academic performance attributed to extenuating circumstances shall constitute consideration for retroactive withdrawal. A student need not be enrolled at Helena College at the time the application for retroactive withdrawal is submitted.

### **Procedure:**

1. Provide a written statement that outlines the nature of your request for a Retroactive Withdrawal and the reasons you believe your appeal merits approval.
2. Submit a letter(s) of support from an academic administrator, faculty member, advisor, or other college professional who is familiar with your situation. If the extenuating circumstance involves medical reasons, it is not necessary for the letter(s) of support to contain details of the medical condition.
3. Submit the completed form and required documentation to Executive Director of Enrollment.

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## Helena College Degrees & Certificates

Associate of Arts  
Associate of Science  
General Education Core Curriculum  
Mathematics at Helena College  
A.A. & A.S Advising Options  
Associate of Applied Science  
Certificate of Applied Science  
Advance & Professional Certificates



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# Helena College Degrees/Certificates

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## **ASSOCIATE OF ARTS DEGREE**

**4 Semesters, General Transfer Degree**

Advising Options in General Studies, Social Work

## **ASSOCIATE OF SCIENCE DEGREE**

**4 Semesters, General Transfer Degree**

Advising Options in General Studies, Accounting Technology, Business Technology,  
Computer Technology, Elementary Education, Pre-Pharmacy

## **ASSOCIATE OF SCIENCE DEGREE – REGISTERED NURSING**

**5 Semesters, Leading to Registered Nursing**

Completion Program for Students with Licensed Practical Nursing by way of the LPN Bridge Curriculum

## **ASSOCIATE OF APPLIED SCIENCE DEGREE**

**4 Semesters**

Accounting Technology  
Administrative Support Management  
Automotive Technology  
Aviation Maintenance Technology  
Business Technology  
Computer Aided Manufacturing  
Diesel Technology

Fire & Rescue  
Industrial Welding & Metal Fabrication  
Medical Administrative Support Management  
Metals Technology  
Network Administration  
Programming

## **CERTIFICATES OF APPLIED SCIENCE DEGREE**

**2 Semesters**

Administrative Support  
Aviation Airframe  
Aviation Power Plant  
Bookkeeping  
Diesel Technology  
Entrepreneurship

Legal Administrative Support  
Machine Tool Technology  
Medical Administrative Support  
Licensed Practical Nursing (LPN)  
Welding Technology

## **PROFESSIONAL CERTIFICATES**

Certificate of Technical Studies in Hybrid Vehicle Service Technology

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## Associate of Arts Degree

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The Associate of Arts (A.A.) degree is a general transfer degree. Completion of this program indicates the student has completed a course of study equivalent to the first two years of a baccalaureate degree. The Associate of Arts degree does not officially include a major or minor course of study.

With an Associate of Arts (A.A.) degree from Helena College, a student can transfer to any Montana University System school with junior class status.

Students may also accumulate credits to transfer to another college or university. Completion of the Helena College general education core requirements (30 credits) satisfies the general core requirements of the Montana University System. All Montana University System institutions will accept the Helena College general education core to satisfy their lower division general education requirements.

The following requirements must be met for completion of an A.A. Degree:

1. Completion of 60 semester credits in courses numbered 100 level and above. A course cannot satisfy more than one general education core or graduation requirement.
2. Completion of the General Education Core Curriculum (30 credits).
3. Completion of the A.A. Requirements: 6 credits: one Foreign Language course, and any Social & Psychological Science, History, Humanities, or Fine Arts.
4. Final cumulative grade point average of 2.20 or above. A grade of "C-" or better is required for all courses.
5. At least 15 credits must be at the 200 level.
6. At least 1/3 of the degree must be completed at Helena College.
7. Completion of one course designated as Cultural Heritage of American Indian (CHAI).

### **Associates of Arts (A.A.) Degree Graduation Requirements:**

#### **General Education Core (30 Credits)**

Natural Sciences	6 Credits
Mathematics	3 Credits
Written Communication	3 Credits
Oral Communication	3 Credits
Social & Psychological Sciences/History	6 Credits
Humanities and Fine Arts	6 Credits
Cultural Diversity	3 Credits

#### **A.A. Requirements (6 Credits)**

One Foreign Language course, and any Social & Psychological Science, History, Humanities, or Fine Arts course.

#### **Advising Option (24 Credits)**

\*Advising Options for A.A. Degree: General Studies, and Social Work

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# Associate of Science Degree

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The Associate of Science (A.S.) degree is a general transfer degree. Completion of this program indicates the student has completed a course of study equivalent to the first two years of a baccalaureate degree. The Associate of Science degree does not officially include a major or minor course of study.

With an Associate of Science (A.S.) degree from Helena College, a student can transfer to any Montana University System school with junior class status.

Students may also accumulate credits to transfer to another college or university. Completion of the Helena College general education core requirements (30 credits) satisfies the general core requirements of the Montana University System. All Montana University System institutions will accept the Helena College general education core to satisfy their lower division general education requirements.

The following requirements must be met for completion of an A.S. Degree:

1. Completion of 60 semester credits in courses numbered 100 level and above. A course cannot satisfy more than one general education core or graduation requirement.
2. Completion of the General Education Core Curriculum (30 credits).
3. Completion of the A.S. Requirements: 6 credits: one Natural Science course with lab, and an additional Natural Science or Mathematics course.
4. Final cumulative grade point average of 2.20 or above. A grade of "C-" or better is required for all courses.
5. At least 15 credits must be at the 200 level.
6. At least 1/3 of the degree must be completed at Helena College.
7. Completion of one course designated as Cultural Heritage of American Indian (CHAI).

## **Associates of Science (A.S.) Degree Graduation Requirements:**

### **General Education Core (30 Credits)**

Natural Sciences	6 Credits
Mathematics	3 Credits
Written Communication	3 Credits
Oral Communication	3 Credits
Social & Psychological Sciences/History	6 Credits
Humanities and Fine Arts	6 Credits
Cultural Diversity	3 Credits

### **A.S. Requirements (6 Credits)**

One Natural Science course and an additional Natural Science or Mathematics course.

### **Advising Option (24 Credits)**

Advising Options for A.S. Degree: General Studies, Accounting Technology, Business Technology, Computer Technology, Elementary Education, and Pre-Pharmacy.

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# General Education Core Curriculum

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The General Education Core of the Helena College provides students with the broad foundation of knowledge essential for success at the associate and baccalaureate levels. All students are prepared for independent, abstract, and critical thinking; responding creatively to problems; applying quantitative and mathematical knowledge; finding information; and communicating both orally and in written forms. This is done to engender life-long learning skills, a foundation of knowledge in a variety of disciplines, and a broadened perspective on our interdependent, changing global community.

The following 7 areas are included in the Helena College General Education Core:

**A. Natural Science**

Math and Natural Science Outcomes

- Understand and demonstrate methods used to gather, test, and interpret scientific data.
- Understand basic principles that explain the natural world.
- Solve quantitative problems and interpret solutions.
- Use inductive and deductive scientific reasoning to solve novel problems.

**B. Mathematics**

Math and Natural Science Outcomes

- Understand and demonstrate methods used to gather, test, and interpret scientific data.
- Understand basic principles that explain the natural world.
- Solve quantitative problems and interpret solutions.
- Use inductive and deductive scientific reasoning to solve novel problems.

**C. Written Communication**

Written/Oral Communications Outcomes

- Demonstrate mastery of engaging, clear, and coherent structures for presenting ideas in a variety of expository and argumentative models.
- Develop ideas logically, clearly, convincingly, and ethically.
- Control the effect of voice in achieving specific communication purposes with specific audiences.
- Control the conventions of language.
- Understand and apply research skills necessary for academic study.
- Employ analysis, synthesis, and evaluation in both writing and reading.
- Exercise proficiency, confidence, and self-reliance in the application of academic activities.

**D. Oral Communication**

Written/Oral Communications Outcomes

- Demonstrate mastery of engaging, clear, and coherent structures for presenting ideas in a variety of expository and argumentative models.
- Develop ideas logically, clearly, convincingly, and ethically.

- Control the effect of voice in achieving specific communication purposes with specific audiences.
- Control the conventions of language.
- Understand and apply research skills necessary for academic study.
- Employ analysis, synthesis, and evaluation in both writing and reading.
- Exercise proficiency, confidence, and self-reliance in the application of academic activities.

**E. Social & Psychological Sciences, History**

Social and Psychological Science Outcomes

- Have an awareness of major perspectives in social and individual behavior.
- Be able to apply social science theories to multicultural perspectives.
- Understand how historical experiences influence current theories.
- Be able to apply critical thinking skills.
- Be able to recognize and practice ethical research techniques.

**F. Humanities & Fine Arts**

Humanities and Fine Arts Outcomes

- Identify a variety of artistic styles, movements, schools of thought/expression, and cultures.
- Analyze, interpret, and evaluate a range of human expressions and values using critical strategies.
- Engage in imaginative expression.
- Appreciate a diversity of world-views or perspectives.

**G. Diversity**

Diversity Component Outcomes

- Students will appreciate diversity across cultures and be able to reflect upon their own cultural values and systems.
- Students will understand and be able to analyze the complex political, social, and economic relationships within and among cultures.
- Students will appreciate the creative works, values, and ways of life and/or history of a cultural group outside of their own culture.

**A: Natural Science**

ASTR110	Introduction to Astronomy	4
BIOB101	Discover Biology	4
BIOB160	Principles of Living Systems w/Lab	4(H)
BIOB170	Principles of Biological Diversity w/Lab	4
BIOB260	Cellular and Molecular Biology w/Lab	4(H)
BIOB272	Genetics & Evolution	4
BIOH104	Basic Human Biology	4
BIOH201	Human Anatomy & Physiology I w/Lab	4
BIOH211	Human Anatomy & Physiology II w/Lab	4
BIOM250	Microbiology for Health Sciences	4(H)
CHMY121	Introduction to General Chemistry	4
CHMY123	Intro to Organic & Biochemistry	4
CHMY141	College Chemistry I	4
CHMY143	College Chemistry II	4(H)
CHMY221	Organic Chemistry I	5
CHMY223	Organic Chemistry II	5(H)
ENSC105	Environmental Science	3
ENST230	Nature and Society	3
GEO101	Introduction to Physical Geology	4
GPHY111	Physical Geography with Lab	4
PHSX205	College Physics I	4
PHSX207	College Physics II	4
PHSX220	Physics I (with Calculus)	4
PHSX222	Physics II (with Calculus)	4
PHSX226	General Science: Integrated Physical Science I	4

**B: Mathematics**

M105	Contemporary Mathematics	3
M115	Probability and Linear Mathematics	3
M121	College Algebra	3
M132	Numbers & Operations for K-8 Teachers	3
M133	Geometry and Geometric Measurement for K-8 Teachers	3
M140	College Math for Healthcare	3
M151	Pre-Calculus	4
M171	Calculus I	4
M172	Calculus II	4
M273	Multivariable Calculus	4
M274	Introduction to Differential Equations	4
STAT216	Introduction to Statistics	3

**C: Written Communication**

WRIT101	College Writing I	3
WRIT201	College Writing II	3

**D: Oral Communication**

COMX111	Introduction to Public Speaking	3
COMX115	Interpersonal Communications	3

**E: Social & Psychological Sciences, History**

ANTY101	Anthropology & the Human Experience	3(D)
BGEN105	Introduction to Business	3
CJUS121	Introduction to Criminal Justice	3
ECNS201	Principles of Microeconomics	3
ECNS202	Principles of Macroeconomics	3
GPHY121	Human Geography	3
HSTA101	American History I	3(C)
HSTA102	American History II	3(C)
HSTA160	Introduction to the American West	3
HSTA215	Post-WW II America	3
HSTA255	Montana History	3
NASX105	Introduction to Native American Studies	3(C,D)
PHL223	Introduction to Deductive Logic	3
PSCI210	Introduction to American Government	3
PSCI240	Introduction to Public Administration	3
PSCI260	State and Local Government	3
PSYX100	Introduction to Psychology	3
PSYX120	Research Methods I	3
PSYX230	Developmental Psychology	3
PSYX233	Fundamentals of Psychology of Aging	3
PSYX240	Fundamentals of Abnormal Psychology	3(D,H)
PSYX250	Fundamentals of Biological Psychology	3(H)
PSYX260	Fundamentals of Social Psychology	3
PSYX270	Fundamentals of Learning	3
PSYX280	Fundamentals of Cognition and Memory	3(H)
SOCI101	Introduction to Sociology	3
SOCI160	Sociology of Media and Popular Culture	3 (D, H)
SOCI201	Social Problems	3
SOCI211	Introduction to Criminology	3
SOCI220	Race, Gender, and Class	3(D)
SOCI234	Sex and Sexualities	3(D, H)
SOCI235	Aging and Society	3

(C)- Course may be taken for CHAI credit  
(D)- Course can be taken for Diversity credit  
(H)- Course can be taken for Honors credit

**F: Humanities & Fine Arts**

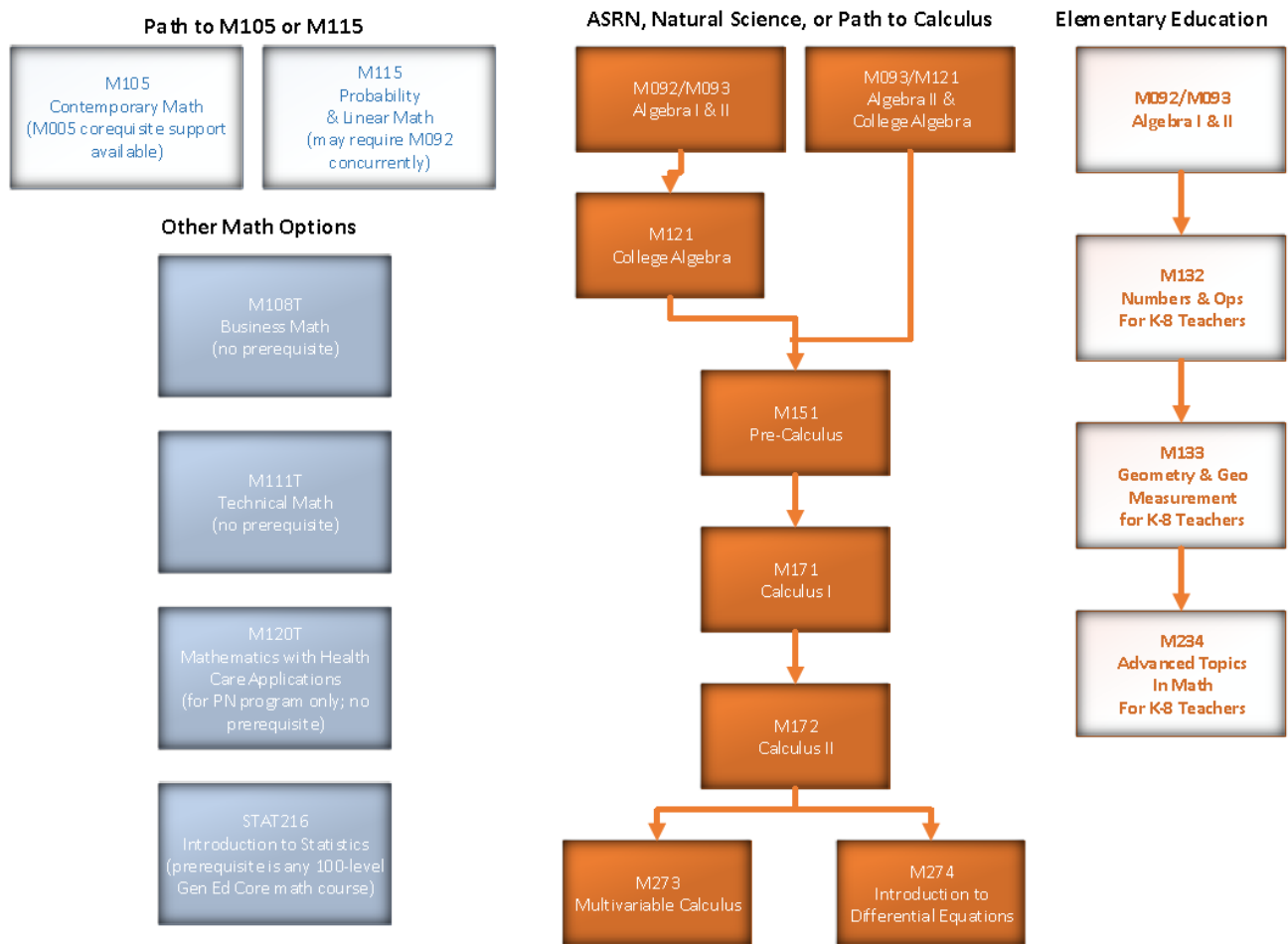
ARTH200	Art of World Civilization	3(H)
ARTH 201	Art of World Civilization II	3
ARTZ101	Art Fundamentals	3
ARTZ105	Visual Language – Drawing	3
ARTZ106	Visual Language – 2-D Foundations	3
ARTZ108	Visual Language 3-D Foundations	3
ARTZ211	Drawing I	3
		(H)
ARTZ221	Painting I	3
BGEN220	Business Ethics and Social Responsibility	
CRWR240	Introduction to Creative Writing Workshop	3
EDU297	Methods: K-8 Music	3
FRCH101	Elementary French I	4(D)
FRCH102	Elementary French II	4(D)
HONR121	Ways of Knowing	3(D, H)
LIT110	Introduction to Literature	3
LIT211	American Literature II	3(D)
LIT213	Montana Literature	3
LIT224	British Literature II	3
LIT227	Introduction to Shakespeare	3
LIT230	World Literature Survey	3(D)
LIT234	Intro to Existential Lit	3
LIT250	The Novel	3
MART145	Web Design	3
MUSI101	Enjoyment of Music	3
MUSI203	American Popular Music	3
PHL110	Problems of Good & Evil	3
PHL215	Introduction to Consciousness Studies	3
SPNS101	Elementary Spanish I	4(D)
SPNS102	Elementary Spanish II	4(D)
THTR101	Introduction to Theater	4
THTR120	Introduction to Acting I	3

**G: Diversity**

ANTY101	Anthropology & the Human Experience	3(D)
ARTH293	Study Abroad	3(D)
LIT211	American Literature II	3(D)
LIT230	World Literature Survey	3(D)
FRCH101	Elementary French I	4(D)
FRCH102	Elementary French II	4(D)
HONR121	Ways of Knowing	3(D)
MUSI203	American Popular Music	3(D)
NASX105	Introduction to Native American Studies	3(D)
PSYX240	Fundamentals of Abnormal Psychology	3(D)
SPNS101	Elementary Spanish I	4(D)
SPNS102	Elementary Spanish II	4(D)
SOCI160	Sociology of Media and Popular Culture	3(D)
SOCI220	Race, Gender, and Class	3(D)
SOCI234	Sex and Sexualities	3(D, H)

<b>H:</b>	<b>Cultural Heritage of American Indians</b>	
NASX105	Native American Studies	3(C, D)
HSTA101	American History I	3(C)
HSTA102	American History II	3(C)
LIT211	American Literature II	3(C)
LIT213	Montana Literature	3(C)

# Mathematics at Helena College



Updated 5/6/2020



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# A.A. & A.S. Advising Options

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Students completing an A.A. or A.S. can complete one of the following Advising Options as part of their degree:

- General Studies (A.A. or A.S.)
- Accounting Technology (A.S.)
- Business Technology (A.S.)

## General Studies

24 open elective credits

- At least 12 credits from General Education Core
- Up to 12 credits can be 100+ level, non-General Education Core

## Accounting Technology

(A.S.)

### Required

ACTG101	Accounting Procedures I	3
ACTG102	Accounting Procedures II	3
ACTG201	Principles of Financial Accounting	3
ACTG202	Principles of Managerial Accounting	3
ACTG205	Computerized Accounting	3
BGEN105	Introduction to Business	3

### Choose TWO of the following

ACTG180	Payroll Accounting	3
ACTG211	Income Tax	3
ACTG215	Foundations of Governmental and Not for Profit Accounting	3
ACTG298	Internship	3
BFIN 265	Intro to Business Finance	3

## Business Technology

(A.S.)

### Required

ACTG101	Accounting Procedures I	3
ACTG201	Principles of Financial Accounting	3
ACTG202	Principles of Managerial Accounting	3
BGEN105	Introduction to Business	3
BMKT225	Marketing	3
BMGT235	Management	3

### Choose TWO of the following

BFIN265	Intro to Business Finance	3
BGEN235	Business Law I	3
BMGT210	Small Business Management	3
BMGT215	Human Resources Management	3
BMGT263	Legal Issues in HR	3
BMIS270	MIS Foundations for Business	3

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# Associate of Applied Science

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The Associate of Applied Science (A.A.S.) degree is ordinarily considered a terminal degree, and is intended to prepare students for immediate employment, usually in a technical or occupational field.

The A.A.S. degree includes a designated field of study, such as Accounting Technology or Welding. Most classes are devoted to a technical or occupational field, with minimal general education coursework.

*Some A.A.S. degrees have a stackable C.A.S. degree options that can be completed while a student works towards the A.A.S.*

Please note that students who decide to work on a four-year degree after completing an A.A.S. degree will have their coursework analyzed, on a class-by-class basis. Some classes may satisfy the specific requirements of a major, minor, option or certificate, or fulfill some part of the general education program. As the A.A.S. degree is not meant to be a transferable degree, however, students should not be surprised if most classes are accepted only as free or elective credits by the four-year institution.

## Minimum requirements

- Completion of a minimum of 60 semester credit hours (some programs may be higher)
- Completion of 3 related instruction courses with a grade of “C-” or higher
- An overall GPA of 2.00 upon completion

## Related Instruction

The related instruction component of Associate of Applied Science degrees provide Helena College students with the general foundation of knowledge essential for success in technical and occupational fields or as a foundation for further education.

Students are provided with practical and/or applied instruction in the following areas:

### A. Written and Oral Communications

- Written and Oral Communications student learning outcomes:
- Develop ideas logically, clearly, convincingly, and ethically
- Control the effect of voice in achieving specific communication purposes with specific audiences
- Employ analysis, synthesis and evaluation in both writing and reading

### B. Computational Skills

- Computational Skills student learning outcomes:
- Solve quantitative problems and interpret solutions
- Use inductive and deductive scientific reasoning to solve novel problems

### C. Human Relations

- Human Relations student learning outcomes:
- Demonstrate an awareness of major perspectives in social and individual behavior
- Be able to apply critical thinking skills
- Be able to recognize and practice ethical research techniques
- Demonstrate appreciation of diversity across cultures and be able to reflect upon students own cultural values and systems
- Demonstrate understanding of, and be able to analyze the complex political, social and economic relationships within and among cultures

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# Certificate of Applied Science

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The Certificate of Applied Science (C.A.S.) degree is ordinarily considered a foundational or first-level degree, and is intended to prepare students for immediate employment, usually in a technical or occupational field.

The C.A.S. Degree includes a designated field of study, such as Accounting Technology or Welding. Most classes are devoted to a technical or occupational field, with minimal general education coursework.

*Some C.A.S. Degrees stack into A.A.S. degrees and can be completed while a student works towards the A.A.S.*

## Minimum requirements

- Completion of a minimum of 29 semester credit hours (some programs may be higher)
- Completion of 3 related instruction courses with a grade of “C-” or higher
- An overall GPA of 2.00 upon completion

## Related Instruction

The related instruction component of Certificate of Applied Science degrees provide Helena College students with the general foundation of knowledge essential for success in technical and occupational fields or as a foundation for further education.

Students are provided with practical and/or applied instruction in the following areas:

### A. Written and Oral Communications

- Written and Oral Communications student learning outcomes:
- Develop ideas logically, clearly, convincingly, and ethically
- Control the effect of voice in achieving specific communication purposes with specific audiences
- Employ analysis, synthesis and evaluation in both writing and reading

### B. Computational Skills

- Computational Skills student learning outcomes:
- Solve quantitative problems and interpret solutions
- Use inductive and deductive scientific reasoning to solve novel problems

### C. Human Relations

- Human Relations student learning outcomes:
- Demonstrate an awareness of major perspectives in social and individual behavior
- Be able to apply critical thinking skills
- Be able to recognize and practice ethical research techniques
- Demonstrate appreciation of diversity across cultures and be able to reflect upon students own cultural values and systems
- Demonstrate understanding of, and be able to analyze the complex political, social and economic relationships within and among cultures

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# Accounting & Business Technology

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The Accounting and Business Technology program area prepares students to enter the business world -- as bookkeepers, as accountants, or as entrepreneurs. Graduates of the Accounting certificate and degree learn skills readying them to be accounting technicians with private, government, or not for profit agencies. Graduates of the Business certificate and degree gain knowledge as associates in business or entrepreneurs of their own ventures. Students choosing either Accounting or Business may transfer their A.A.S. degree toward earning a Bachelor of Applied Science in Business through other Montana higher education institutions.

**Requirements for all Accounting and Business certificates and degrees:** Students must fulfill their math requirements in at least M 108T Business Math or M 115 Probability and Linear Mathematics or M 121 College Algebra or STAT 216 Intro to Statistics and their English requirements in WRIT 101 College Writing I. Students who do not place into these classes will be required to take additional English and mathematics courses at the beginning of their program.

## **Program Outcomes**

- The successful graduate of the Accounting and Business Technology program should be expected to:
- Demonstrate knowledge of accounting procedures (accounting);
- Identify the fundamentals of launching and maintaining a small business (business);
- Demonstrate a broad understanding of the business environment as it relates to legal, ethical, and economic issues (accounting and business);
- Demonstrate competency in computer applications maintaining accounting records and business documents (accounting and business);
- Apply communication skills toward enhancing interpersonal relationships (accounting and business);
- Demonstrate critical thinking and problem-solving abilities (accounting and business).

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# Accounting & Business Technology

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## **Accounting Technology A.A.S.** **Associate of Applied Science**

The Associate of Applied Science (A.A.S.) degree is ordinarily considered a terminal degree, and is intended to prepare students for immediate employment, usually in a technical or occupational field. Students choosing an A.A.S. in Accounting may transfer their A.A.S. degree toward a Bachelor of Applied Science degree in Business through other Montana higher education institutions.

The Bookkeeping C.A.S. is a stackable credential towards the Accounting Technology A.A.S. degree. Students may complete the Bookkeeping C.A.S. coursework to obtain the C.A.S., which meets the criteria for the first year of coursework towards the A.A.S. in Accounting Technology.

# Accounting & Business Technology

## Accounting Technology A.A.S.

### Stackable with Bookkeeping C.A.S.

#### Required Courses

Associate of Applied Science – 60 credits			
Accounting and Business Technology: Accounting Technology (Stackable with Bookkeeping C.A.S.)			
Course #	Course Title	CR	Pre - Requisites
<b>First Semester (15 credits)</b>			
ACTG 101	Accounting Procedures I	3	
BGEN 105	Intro to Business	3	Recommended WRIT 101 or WRIT 101 taken concurrently
WRIT 101	College Writing	3	WRIT 096, if placement score indicates
<b>Choose one of the following:</b>			
M 108T	Business Math	3	
M 115	Probability and Linear		Placement or M 092 concurrently
M 121	College Algebra		Placement or M 092/M 093 or M 093 concurrently
STAT 216	Intro to Statistics		Placement or M 105/115/121
<b>Choose one of the following:</b>			
CAPP 156	MS Excel	3	CAPP 156 recommended for accounting students
CSCI 172	Intro Comp Model		
<b>Second Semester (15 credits)</b>			
ACTG 102	Accounting Procedures II	3	ACTG 101
ACTG 205	Computer Accounting	3	ACTG 101; off-campus pc (no mac)
BGEN 220	Business Ethics & Social Responsibility	3	Recommend BGEN 105
CAPP 266	Advanced MS Excel	3	Spring only; CAPP 156 (recommended for accounting) or CSCI 172
<b>Choose one of the following:</b>			
PSYX 100	Intro to Psych	3	Placement in WRIT 101 or WRIT 101 taken concurrently
SOCI 101	Intro to Sociology		
<b>Third Semester (15 credits)</b>			
ACTG 180	Payroll Accounting	3	ACTG101
ACTG 201	Principles of Fin Accounting	3	ACTG 101 and transfer math required or consent of instructor; ACTG102 recommended as a prerequisite for accounting students; (ACTG 102 waived for business students only)
ACTG 211	Income Tax	3	Fall only
BGEN 235	Business Law I	3	BGEN 105, Fall only
<b>Choose one of the following:</b>			
COMX 111	Intro to Public Speaking	3	
COMX 115	Interpersonal Comm.		
<b>Fourth Semester (15 credits)</b>			
ACTG 202	Principles of Manag. Actg.	3	ACTG 201
ACTG 215	Found of Govt Accounting	3	ACTG 101, Spring only
BFIN 265	Intro to Business Finance	3	ACTG 101 and BGEN 105, Spring only
<b>Choose one of the following:</b>			
ECNS 201	Microeconomics	3	Fall only
ECNS 202	Macroeconomics		Spring only
<b>Choose one of the following:</b>			
ACTG 298	Internship	3	Consent of instructor
CSCI 172	Intro Comp Model		
<b>Other Coursework:</b>			

The suggested sequence in this catalog is for students entering in the fall semester. Please see your advisor for a suggested spring entry sequence.

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# Accounting & Business Technology

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## Bookkeeping C.A.S.

### Certificate of Applied Science – 30 Credits

This is a stackable option as part of an Accounting and Business Technology A.A.S. degree. Students may complete the coursework below to obtain the C.A.S. and meets the criteria for the first year of coursework towards the A.A.S. in Accounting Technology.

Please see the Helena College website for gainful employment information related to this program:

[http://HelenaCollege.edu/academics/programs/acc\\_bus/default.aspx](http://HelenaCollege.edu/academics/programs/acc_bus/default.aspx)

#### Required Courses

Course #	Course Title	CR	Pre - Requisites
<b>First Semester (15 credits)</b>			
ACTG 101	Accounting Procedures I	3	
BGEN 105	Intro to Business	3	Recommended WRIT 101 or WRIT 101 taken concurrently
WRIT 101	College Writing	3	WRIT 096 if placement score indicates
<b>Choose one of the following:</b>			
M 108T	Business Math	3	
M 115	Probability & Linear Mathematics	3	Placement or M 092 concurrently
M 121	College Algebra	3	Placement or M 092/M 093 or M 093 concurrently
STAT 216	Intro to Statistics	3	Placement or M 105 / M 115 / M 121
<b>Choose one of the following:</b>			
CAPP 156	MS Excel	3	Recommended for accounting students
CSCI 172	Intro to Computer Modeling	3	Recommend CAPP 156 for accounting students
<b>Second Semester (15 credits)</b>			
ACTG 102	Accounting Procedures II	3	ACTG 101
ACTG 205	Computerized Accounting	3	ACTG 101; off-campus PC (no Mac)
BGEN 220	Business Ethics & Social Responsibility	3	BGEN 105 or instructor approval
CAPP 266	Advanced MS Excel	3	CAPP 156 or CSCI 172
<b>Choose one of the following:</b>			
PSYX 100	Intro to Psychology	3	Placement in WRIT 101 or WRIT 101 taken concurrently
SOCI 101	Intro to Sociology	3	

*The suggested sequence in this catalog is for students entering in the fall semester. Please see your advisor for a suggested spring entry sequence. Updated 3/30/2020*

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# Accounting & Business Technology

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## **Business Technology A.A.S. Associate of Applied Science**

The Associate of Applied Science (A.A.S.) degree is ordinarily considered a terminal degree and is intended to prepare students for immediate employment, usually in a technical or occupational field. Students choosing an A.A.S. in Business may transfer their A.A.S. degree toward a Bachelor of Applied Science degree in Business through other Montana higher education institutions.

The Entrepreneurship C.A.S. is a stackable credential towards the Business Technology A.A.S. degree. Students may complete the Entrepreneurship C.A.S. coursework to obtain the C.A.S., which meets the criteria for the first year of coursework towards the A.A.S. in Business Technology.



# Accounting & Business Technology

**Business Technology A.A.S.**  
**Stackable with Entrepreneurship C.A.S.**  
**Required Courses**

<b>Associate of Applied Science – 60 credits</b>			
<b>Accounting and Business Technology: Business Technology (Stackable with C.A.S. Entrepreneurship)</b>			
Course #	Course Title	CR	Pre - Requisites
<b>First Semester (15 credits)</b>			
ACTG 101	Accounting Proc. I	3	
BGEN 105	Intro to Business	3	Recommended WRIT 101 or WRIT 101 taken concurrently
WRIT 101	College Writing	3	WRIT 096, if placement score indicates
M 108T	Business Math	3	
M 115	Probability and Linear		Placement or M 092 concurrently
M 121	College Algebra		Placement or M 092/M 093 or M 093 concurrently
STAT 216	Intro to Statistics		Placement or M 105/115/121
CAPP 156	MS Excel	3	CSCI 172 recommended for business students
CSCI 172	Intro Comp Model		
<b>Second Semester (15 credits)</b>			
ACTG 205	Computer Accounting	3	ACTG 101; off-campus pc (no mac)
BGEN 220	Business Ethics & Social Responsibility	3	BGEN105 or consent of instructor
BMKT 240	Advertising	3	Fall only; BGEN 105
MART 145	Web Design		Spring only
CAPP 153	MS PowerPoint	3	Fall only
CAPP 154	MS Word	3	Spring only
PSYX 100	Intro to Psych	3	Placement in WRIT 101 or WRIT 101 taken concurrently
SOCI 101	Intro to Sociology		
<b>Third Semester (15 credits)</b>			
BGEN235	Business Law I	3	Fall only; BGEN 105
BMIS 270	MIS Foundations Bus.	3	Fall only; CSCI 172 (preferred for business) or CAPP 156
BMKT 225	Marketing	3	BGEN 105 and WRIT 101
ACTG 180	Payroll Accounting	3	ACTG 101
BMGT 215	Human Res Management		Fall only; BGEN 105
COMX 111	Intro to Public Speak	3	
COMX 115	Interpersonal Comm.		
<b>Fourth Semester (15 credits)</b>			
BFIN 265	Intro to Bus Finance	3	Spring only; ACTG 101 and BGEN 105
BMGT 210	Sm. Bus. Entre.	3	Spring only; Consent of instructor (capstone course),
BMGT 235	Management	3	BGEN 105 and WRIT 101
BGEN 298	Internship	3	Consent of instructor
BMGT 263	Legal Issues in HR		Spring only; BGEN 105
ECNS 201	Microeconomics	3	Fall only
ECNS 202	Macroeconomics		Spring only

*The suggested sequence in this catalog is for students entering in the fall semester. Please see your advisor for a suggested spring entry sequence.*

# Accounting & Business Technology

## Entrepreneurship C.A.S. Certificate of Applied Science

This is a stackable option under as part of an Accounting and Business Technology A.A.S. degree. Students may complete the coursework below to obtain the C.A.S. and meets the criteria for the first year of coursework towards the A.A.S. in Business Technology.

Please see the Helena College website for gainful employment information related to this program:

[http://HelenaCollege.edu/academics/programs/acc\\_bus/default.aspx](http://HelenaCollege.edu/academics/programs/acc_bus/default.aspx)

### Required Courses

Course #	Course Title	CR	Pre - Requisites
<b>First Semester (15 credits)</b>			
ACTG 101	Accounting Procedures I	3	
BGEN 105	Intro to Business	3	Recommended WRIT 101 or WRIT 101 concurrently
WRIT 101	College Writing	3	WRIT 096 if placement score indicates
<b>Choose one of the following:</b>			
M 108T	Business Math	3	
M 115	Probability & Linear Mathematics	3	Placement or M 092 concurrently
M 121	College Algebra	3	Placement or M 092, M 093, M 093 concurrently
STAT 216	Intro to Statistics	3	Placement or M 105, M 115, M 121
<b>Choose one of the following:</b>			
CAPP 156	MS Excel	3	CSCI 172 recommended for business students
CSCI 172	Intro to Computer Modeling	3	Recommended for business students
<b>Second Semester (15 credits)</b>			
ACTG 205	Computer Accounting	3	ACTG 101; off-campus PC (no Mac)
BGEN 220	Business Ethics & Social Responsibility	3	BGEN 105 or instructor approval
<b>Choose one of the following:</b>			
BMKT 240	Advertising	3	BGEN 105; spring only
MART 145	Web Design	3	
<b>Choose one of the following:</b>			
CAPP 153	MS Power Point	3	Fall only
CAPP 154	MS Word	3	Spring only
<b>Choose one of the following:</b>			
PSYX 100	Intro to Psych	3	Placement in WRIT 101 or WRIT 101 concurrently
SOCI 101	Intro to Sociology	3	

*The suggested sequence in this catalog is for students entering in the fall semester. Please see your advisor for a suggested spring entry sequence.*

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# Automotive Technology

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## **Automotive Technology A.A.S. Associate of Applied Science**

The Automotive Technology curriculum consists of eight areas of study as defined by the National Institute for Automotive Service Excellence (ASE). ASE is a non-profit corporation dedicated to improving the quality of automotive service and repair as well as assisting in training and program development throughout the nation. The Helena College Automotive Technology Program holds an ASE Master Automobile Service Technology (MAST) level certification. The eight ASE content areas of study, along with the College's general education requirements, are structured into four groups with all eight areas of study being offered during a two-year period. Each student will be given the opportunity to become certified by ASE in each of the eight content areas. Successful completion of this program will enable students to enter the automotive job market.

### **Program Outcomes**

- Demonstrate safe shop practices and hazardous material handling
- Diagnose and repair automotive electrical systems to ASE Education Foundation Standard
- Diagnose and repair automotive engine performance, fuel, and emission control systems to ASE Education Foundation Standard
- Diagnose and repair automotive brakes suspension, and steering systems to ASE Education Foundation Standard
- Diagnose and repair automotive internal combustion engine systems to ASE Education Foundation Standard
- Diagnose and repair automotive powertrain systems (manual and automatic transmission/transaxles and drive axles) to ASE Education Foundation Standard
- Diagnose and repair automotive heating and air conditioning systems as to ASE Education Foundation Standard

The Helena College Automotive Technology program has partnered with local industry to provide work-based learning opportunities for each student in the Automotive Program. Students will be offered a two-year apprenticeship/internship opportunity at a local dealership or private business to obtain practical experience in addition to their curriculum requirements. Upon completion of the program students will have approximately 1000 hours of on the job training to accompany their degree.



Note: Upon admission to the Automotive Technology Program, students are required to purchase a tool set as outlined in the tool section of this catalog. Students are required to purchase school-approved shirts and red rags for use in the shops and are responsible for a cleaning fee each semester.

## Automotive Technology A.A.S.

### Required Courses

Course #	Course Title	CR	Pre - Requisites
<b>First Semester (18 Credits)</b>			
AST 103	Automotive Mechanics Core	3	Co-requisite M111T
AST 130	Introduction to Automotive Electronics	6	
AST 230	Electrical/Electronic Systems	6	AST103, AST130
M 111T	Technical Mathematics	3	
<b>Second Semester (18 Credits)</b>			
AST 108	Manual Drivetrains	5	AST103, AST130, AST230
AST 114	Automotive Brakes	5	AST103, AST108, AST130, AST230
AST 220	Automotive Steering and Suspension	5	AST103, AT 108, AST130, AST230
WRIT 121 T	Technical Writing	3	WRIT 096 as co-requisite if testing indicates
<b>Third Semester (17 Credits)</b>			
AST 160	Automotive Engine Repair	6	AST103, AST130, AST230
AST 172	Heating A/C	5	AST 103, AST130, AST160, AST230
AST 270	Auto Transmission	6	AST103, AST108, AST130, AST230
<b>Fourth Semester (16 Credits)</b>			
AST 262	Engine Perform I	6	AST103, AST 130, AST160, AST230
AST 264	Engine Performance II	6	AST103, AST130, AST160, AST230
AST 274	Introduction to Hybrid Vehicle Technology	3	AST 103, AST130, AST160, AST 230
COMX 106	Communicating in a Dynamic Workplace	2	

Updated 5/20/2020

The suggested sequence in this catalog is for students entering in the fall semester. Please see your advisor for a suggested spring entry sequence.

Note: Upon their successful graduation in the Automotive Technology Program at Helena College, a 4-year B.S. degree in Automotive Technology is available through a partnership at Montana State University-Northern.

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# Automotive Technology

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## Hybrid Vehicle Service Technology Certificate Certificate of Technical Studies

The Hybrid Vehicle Service Technology Certificate prepares students for employment in automotive service technician occupations working with hybrid vehicle technologies such as:

- Electric and Hybrid Vehicle Service Technician
- Development Technician
- Battery Service Technician
- Electrical Test Technician

Courses in this certificate of technical studies emphasize laboratory skills and a project-based experience.

Upon successful completion of the Associate of Applied Science in Automotive Technology, students are able to take the required course, AST274, in the summer semester.

Please see the Helena College website for gainful employment information related to this program:

<http://helenacollege.edu/academics/programs/auto/default.aspx>

*Note: Upon admission to the Automotive Technology Program, students are required to purchase a tool set as outlined in the tool section of this catalog. Students are required to purchase school-approved shirts and red rags for use in the shops and are responsible for a cleaning fee each semester.*

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# Aviation Maintenance Technology

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## Associate of Applied Science

The mission of the Aviation Maintenance Technology program at Helena College is to provide entry-level technicians who are trained in the fundamentals of aircraft maintenance with respect to general aviation and the light utility helicopter industry. With this training, a technician will be prepared for employment in many different occupations in the aviation industry including: Fixed Base Operations, Repair Stations, Commuter Airlines, Air Cargo, Aircraft Restoration, Flight Schools and Aerial Fire Fighting, to name a few.

Students are trained above and beyond the standards outlined in 14 CFR 147 (FAR Part 147) and the guidelines set forth in the program approved curriculum. Upon completion of 1900 hours of course work, students will be prepared to take three written exams and sit with a Designated Maintenance Examiner qualified by the FAA to be given three Oral and Practical Exams.

Upon completion of the required FAA tests, a student will be certificated by the FAA as a mechanic with either or both an Airframe and PowerPlant rating. With additional general coursework through Helena College, students will also be awarded an Associate of Applied Sciences degree in Aviation Maintenance Technology.

### Program Outcomes

- Read and interpret Federal Aviation Regulations, aircraft service manuals, directives and bulletins to properly complete aircraft maintenance and repairs
- Prepare logbook entries and prepare proper documentation for the repairs completed on an aircraft
- Complete proper jacking procedures, ground handling and servicing on aircraft.
- Prepare weight and balance computations and properly prepare the required documentation
- Evaluate sheet metal, composite structure, fabric covering and structural damage and prepared and complete the required repairs in accordance with approved repair procedures
- Complete repair and maintenance on various airframe components and systems
- Complete repair and maintenance on aircraft reciprocating and turbine engines.
- Return an aircraft to service after maintenance and repair
- Inspect, remove and install non-repairable items such as propellers and aircraft instruments



*Note: Upon admission to the Aviation Maintenance Technology Program, students are required to purchase a tool set as outlined in the tool section of this catalog. Students are required to purchase school-approved shirts and red rags for use in the shops and are responsible for a cleaning fee each semester.*

# Aviation Maintenance Technology

## Aviation Maintenance Technology A.A.S. Associate of Applied Science Required Courses

Course #	Course Title	CR	Comments	
<b>First year Fall Semester – General</b>				
AVMT 100	Intro to Aviation Maintenance/Mathematics and Basic Physics	3		
AVMT 105	Basic Electricity	3.5		
AVMT 110	Aircraft Drawings/Weight and Balance	3		
AVMT 115	Materials and Processes/Fluid Lines and Fittings/Cleaning and Corrosion Control	4		
AVMT 120	Ground Operation and Servicing	1.5		
AVMT 125	Maintenance Publications/Forms & Records/Mechanic Privileges & Limitations	3		
AVMT 130	Basic Aerodynamics	3		
M111T	Technical Math	3		
	Total Credits	24*	Will require overload signature	
<b>First year Spring Semester - Airframe</b>				
AVMT 135	Assembly & Rigging/Airframe Inspection	4		
AVMT 140	Sheet Metal	4		
AVMT 145	Composites and Plastics	4		
AVMT 150	Wood Structures	2		
AVMT 175	Aircraft Electrical Systems	2.5		
AVMT 187	Aircraft Instrument Systems/Comm and Nav Systems	2.25		
WRIT 121T	Technical Writing	3		
COMX 106	Communicating in a Dynamic Workplace	2		
	Total Credits	23.75*		Will require overload signature
<b>First year Summer Semester – Airframe</b>				
AVMT 155	Aircraft Covering/Aircraft Finishes	2		
AVMT 160	Aircraft Welding	3		
AVMT 165	Hydraulic and Pneumatic Power Systems	3		
AVMT 170	Aircraft Landing Gear Systems/Position	3		
AVMT 180	Aircraft Fuel Sys/Fire Protection	3		
AVMT 185	Cabin Atmosphere Control Systems	2.5		
COMX 106	Communicating in a Dynamic Workplace	2		
	Total Credits	18.5		
<b>Second year Fall Semester - Powerplant</b>				
AVMT 225	Reciprocating Engine Systems	5.5		
AVMT 230	Reciprocating Engine Overhaul	5.5		
AVMT 240	Engine Instrument Systems	3		
AVMT 250	Engine Fire Protection Systems	2.5		
	Total Credits	16.5		
<b>Second year Spring Semester – Powerplant</b>				
AVMT 235	Turbine Engines and Systems 1	6		
AVMT 237	Turbine Engines and Systems 2	2		
AVMT 245	Engine Electrical Systems/Auxiliary Power Unit	3.75		
AVMT 255	Propellers and Unducted Fans	4		
	Total Credits	13.75		

\*\*\* Technical Math can be taken in fall of first year or fall of second year. \* If degree is Airframe CAS student will need math in the first year and credit overload will need to be approved.

*The suggested sequence in this catalog is for students entering in the fall semester. Please see your advisor for a suggested spring entry sequence.*

# Aviation Maintenance Technology

## Aviation Airframe C.A.S. Certificate of Applied Science

Please see the Helena College website for gainful employment information related to this program:  
[http://HelenaCollege.edu/academics/programs/acc\\_bus/default.aspx](http://HelenaCollege.edu/academics/programs/acc_bus/default.aspx)

### Required Courses

Certificate of Applied Science Aviation Technology – Airframe CAS				
Course #	Course Title	CR	Pre - Requisites	Comments
<b>First year Fall Semester</b>				
AVMT 100	Intro to Aviation Maintenance/Mathematics and Basic Physics	3		
AVMT 105	Basic Electricity	3.5		
AVMT 110	Aircraft Drawings/Weight and Balance	3		
AVMT 115	Materials and Processes/Fluid Lines and Fittings/Cleaning and Corrosion Control	4		
AVMT 120	Ground Operation and Servicing	1.5		
AVMT 125	Maintenance Publications/Forms & Records/Mechanic Privileges & Limitations	3		
AVMT 130	Basic Aerodynamics	3		
M111T	Technical Math	3		
	<b>Total Credits</b>	<b>24*</b>		Will require overload signature
<b>First year Spring Semester</b>				
AVMT 135	Assembly & Rigging/Airframe Inspection	4		
AVMT 140	Sheet Metal	4		
AVMT 145	Composites and Plastics	4		
AVMT 150	Wood Structures	2		
AVMT 175	Aircraft Electrical Systems	2.5		
AVMT 187	Aircraft Instrument Systems/Comm and Nav Systems	2.25		
WRIT 121T	Technical Writing	3		
	<b>Total Credits</b>	<b>21.75</b>		Will require overload signature
<b>First year Summer Semester</b>				
AVMT 155	Aircraft Covering/Aircraft Finishes	2		
AVMT 160	Aircraft Welding	3		
AVMT 165	Hydraulic and Pneumatic Power Systems	3		
AVMT 170	Aircraft Landing Gear Systems/Position	3		
AVMT 180	Aircraft Fuel Sys/Fire Protection	3		
AVMT 185	Cabin Atmosphere Control Systems	2.5		
COMX 106	Communicating in a Dynamic Workplace	2		
	<b>Total Credits</b>	<b>18.5</b>		

\* Credit load will require manual override.

The suggested sequence in this catalog is for students entering in the fall semester. Please see your advisor for a suggested spring entry sequence.



# Aviation Maintenance Technology

## Aviation PowerPlant C.A.S. Certificate of Applied Science

Please see the Helena College website for gainful employment information related to this program:

[http://HelenaCollege.edu/academics/programs/acc\\_bus/default.aspx](http://HelenaCollege.edu/academics/programs/acc_bus/default.aspx)

### Required Courses

CAS- Powerplant Aviation Technology				
Course #	Course Title	CR	Pre - Requisites	Comments
<b>Fall Semester – General</b>				
AVMT 100	Intro to Aviation Maintenance/Mathematics and Basic Physics	3		
AVMT 105	Basic Electricity	3.5		
AVMT 110	Aircraft Drawings/Weight and Balance	3		
AVMT 115	Materials and Processes/Fluid Lines and Fittings/Cleaning and Corrosion Control	4		
AVMT 120	Ground Operation and Servicing	1.5		
AVMT 125	Maintenance Publications/Forms & Records/Mechanic Privileges & Limitations	3		
AVMT 130	Basic Aerodynamics	3		
M111T	Technical Math	3		
	Total Credits	24		Will require overload signature
<b>Second year Spring Semester – Powerplant</b>				
AVMT 235	Turbine Engines and Systems 1	6		
AVMT 237	Turbine Engine and Systems 2	2		
AVMT 245	Engine Electrical Systems/Auxiliary Power Unit	3.75		
AVMT 255	Propellers and Unducted Fans	4		
COMX 106	Communicating in a Dynamic Workplace	2		
WRIT 121T	Technical Writing	3		
	Total Credits	20.75		
<b>Second year Fall Semester - Powerplant</b>				
AVMT 225	Reciprocating Engine Systems	5.5		
AVMT 230	Reciprocating Engine Overhaul	5.5		
AVMT 240	Engine Instrument Systems	3		
AVMT 250	Engine Fire Protection Systems	2.5		
	Total Credits	16.5		

\* Credit load will require manual override.

\*\* Technical Math can be taken in either fall semester.

*The suggested sequence in this catalog is for students entering in the fall semester. Please see your advisor for a suggested spring entry sequence.*

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# Computer Aided Manufacturing

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## Computer Aided Manufacturing A.A.S.

### Associate of Applied Science

Computer Aided Manufacturing is designed to prepare students as entry-level machinists in many areas, including aerospace, computer industries, job shop, gunsmithing, tool and die making, Computer Numerical Control (CNC) operator, and CNC programmer. Students will study machining processes and procedures using lathes, mills, drill presses, and grinders.

The first-year students will use a variety of manual machines, including engine lathes, horizontal and vertical mills, and drill presses. Students will work from blueprints and follow exact specifications and apply practical shop math to accomplish the required tasks. Much of the lab time will be used for shop and project work.

The second-year CNC portion of machine shop is devoted to the programming and operation of the CNC machine. Students will be prepared to enter the work force as entry-level programmers and CAD/CAM technicians. Students will program and operate machining centers and turning centers in the lab. Students will learn the Mastercam programming system, which allows students to design parts on the computer and then manufacture them in the lab. Students will work from blueprints and exact specifications that are used in industry. Lab work will include manual and CNC machine use. These machines will be used for manufacturing fixtures, project work, and production projects.

#### Program Outcomes

- Perform machining operations to exacting tolerances common in industry.
- Prepare and demonstrate cutting tool applications.
- Prepare, setup, and operate precision manufacturing equipment.
- Interpret and create various blueprint types and information.
- Demonstrate and complete machine and tooling maintenance

*Note: Upon admission to the Computer Aided Manufacturing Program, students are required to purchase a tool set as outlined in the tool section of this catalog. Students are required to purchase school-approved shirts and red rags for use in the shops and are responsible for a cleaning fee each semester.*

## Computer Aided Manufacturing A.A.S. 71 Credits

### Required Courses

<b>First Semester (18 Credits)</b>			
MCH 240	Metallurgy	2	
MCH 130	Machine Shop	3	M111T (Co-req)
MCH 132	Intro to Engine Lathes	5	
MCH 134	Intro to Mills	5	MCH130 (Co-req)
M111T	Technical Mathematics	3	MCH 130 (Co-req)
<b>Second Semester (19 Credits)</b>			
MCH 136	Advanced Lathes	5	First semester MCH courses and M111T
MCH 137	Advanced Mills	5	First semester MCH courses and M111T
MCH 139	Grinding Applications	2	First semester MCH courses and M111T
DDSN 135	Solidworks	2	First semester MCH courses and M111T
MCH 245	Shop Practices 2	2	First semester MCH courses and M111T
WRIT 121T	Intro to Tech Writing	3	
COMX 106	Communicating in a Dynamic Workplace	2	
<b>Third Semester (16 Credits)</b>			
Completion of the first year (first and second semester) is the pre-requisite for the second year.			
MCH 230	Tooling and Fixtures in CNC	2	
MCH 231	CNC Turning Operations Level 1	4	MCH 230 (Co-req) MCH 136 (Pre-req)
MCH 232	CNC Turning Programming Operations Level 2	3	MCH 231 (Co-req)
MCH 234	CNC Milling Operations Level 1	4	MCH 230 (Co-req) MCH 137
MCH 235	CNC Milling Programming Operations Level 2	3	MCH 234 (Co-req)
<b>Fourth Semester (18 Credits)</b>			
MCH 233	CNC Turning Programming Operations Level 3	3	MCH231 and MCH232
MCH 236	CNC Milling Programming Operations Level 3	3	MCH234 and MCH235
MCH 237	CAD/CAM CNC Turning Center	5	MCH233 (Co-req)
MCH 238	CAD/CAM CNC Machining Center	5	MCH236 (Co-req)

*\*\* Students should take COMX 106 in their first-year spring semester if they are not completely sure if they are getting a C.A.S. or an A.A.S. to ensure all their general education requirements are completed within the first year.*

*The suggested sequence in this catalog is for students entering in the fall semester. Please see your advisor for a suggested spring entry sequence.*

*Updated 5/15/2020*

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# Computer Aided Manufacturing

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## Machine Tool Technology C.A.S. Certificate of Applied Science

Machine Tool Technology is designed to prepare students as entry-level machinists in many areas, including aerospace, computer industries, job shop, gun smithing, tool and die making, Students will study machining processes and procedures using lathes, mills, drill presses, cylindrical grinders, and surface grinders.

The first-year students will use a variety of manual machines, including engine lathes, horizontal and vertical mills, cylindrical grinders, surface grinders, drill presses, and radial arm drill. Students will work from blueprints and follow exact specifications and apply practical shop math to accomplish the required tasks. Much of the lab time will be used for shop and project work.

*Note: Upon admission to the Machine Tool Technology Program, students are required to purchase a tool set as outlined in the tool section of this catalog. Students are required to purchase school-approved shirts and red rags for use in the shops and are responsible for a cleaning fee each semester.*

Please see the Helena College website for gainful employment information related to this program:

<http://HelenaCollege.edu/academics/programs/machine/default.aspx>

### Required Courses

Course #	Course Title	CR	Pre - Requisites
<b>First Semester (18 credits)</b>			
MCH 240	Metallurgy	2	
MCH130	Machine Shop	3	M 111T (co-req)
MCH132	Introduction to Engine Lathes	5	
MCH134	Introduction to Mills	5	MCH 130 (co-req)
M111T	Technical Mathematics	3	MCH 130 (co-req)
<b>Second Semester (21 credits)</b>			
MCH136	Advanced Lathes	5	First semester MCH courses and M111T
MCH137	Advanced Mills	5	First semester MCH courses and M111T
MCH139	Grinding Applications	2	First semester MCH courses and M111T
DDSN 135	Solidworks	2	First semester MCH courses and M111T
MCH245	Shop Practices	2	First semester MCH courses and M111T
WRIT 121T	Intro to Tech Writing	3	
COMX 106	Communicating in a Dynamic Workplace	2	

Updated 5/15/2020

The suggested sequence in this catalog is for students entering in the fall semester. Please see your advisor for a suggested spring entry sequence.

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# Computer Technology

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## **Computer Technology A.A.S. – Network Administration**

**Associate of Applied Science**

and / or

## **Computer Technology A.A.S. – Programming**

**Associate of Applied Science**

Students are required to take the classes and credits shown. Students may choose one or both advising options, Network Administration and/or Programming, within their Computer Technology A.A.S. degree.

### **Program Outcomes**

- An ability to apply knowledge of computing and mathematics appropriate to the discipline
- An ability to analyze a problem, and identify and define the computing requirements appropriate to its solution
- An ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs
- An ability to function effectively on teams to accomplish a common goal
- An understanding of professional, ethical, legal, security and social issues and responsibilities
- An ability to communicate effectively with a range of audiences
- An ability to analyze the local and global impact of computing on individuals, organizations, and society
- Recognition of the need for and an ability to engage in continuing professional development
- An ability to use current techniques, skills, and tools necessary for computing practice.
- Synthesize and apply information to meet an identified need.

**Program Requirements:** Students must fulfill their math requirements in at least M115 Probably and Linear Math and their English requirements in at least WRIT 121T introduction to Technical Writing.

**Computer Technology Literacy Requirement:** Please see a Program advisor regarding the computer literacy requirement for this degree.

## Computer Technology A.A.S. – Network Administration – 63 Credits

### Required Courses

Course #	Course Title	CR	Pre - Requisites
<b>First Semester (14 Credits)</b>			
CSCI 100	Intro to Programming	3	
CSCI 194	CT Seminar	2	
ITS 164	Networking Fundamentals	3	
M 115	Probability or Linear	3	Placement or M 092 concurrently
WRIT 121T	Intro to Tech Writing	3	WRIT 096, if placement score indicates
<b>Second Semester (17 Credits)</b>			
CSCI 240	Database and SQL	3	
ITS 280	Computer Repair	4	
ITS 224	Intro to Linux	3	CSCI 100
MART 145	Web Design	3	
NTS-103	CCNA1: Introduction to Networks Lab	1	Co-Req NTS-104
NTS 104	CCNA 1: Introduction to Networks	3	ITS-164
<b>Third Semester (14 Credits)</b>			
COMX 106	COMM in a Dynamic Workplace	2	
ITS 218	Network Security	3	ITS 224, ITS 280, NTS 105
ITS 230	Admin Script PowerShell	2	ITS 280, NTS 104
ITS 231	Admin Script Python	2	ITS 280, NTS 104
NTS 105	CCNA 2: Switching, Routing and Wireless Essentials	3	NTS 103/104
<b>Choose one of the following:</b>			
CSCI 298 CSCI 292	Internship or Independent Study or CT Elective	2	Instructor Approval
<b>Fourth Semester (18 Credits)</b>			
CSCI 212	Web Server Admin	3	NTS 105, ITS 224
CSCI 221	Systems Analysis & Design	4	CSCI 240 and WRIT 101/121T
CSCI 299	Capstone	2	CSCI-194
ITS 212	Network Ops - Server	3	ITS 280, NTS 105
ITS 274	Ethical Hacking and Network Defence	3	ITS 224, ITS 280, NTS 204
NTS 204	CCNA 3: Enterprise Networking, Security and Automation	3	NTS 105

Updated 5/15/2020

The suggested sequence in this catalog is for students entering in the fall semester. Please see your advisor for a suggested spring entry sequence.

# Computer Technology

## Computer Technology A.A.S. – Programming – 60 Credits

### Required Courses

Course #	Course Title	CR	Pre - Requisites
<b>First Semester (14 Credits)</b>			
CSCI 100	Intro to Program	3	
CSCI-194	Seminar	2	
ITS-164	Network Fundamentals	3	
M 115	Probability and Linear	3	Placement or M 092 concurrently
WRIT 121T	Intro to Tech Writ	3	WRIT 096, if placement score indicates
<b>Second Semester (18 Credits)</b>			
CSCI 111	Prog with Java I	4	CSCI 100
CSCI 240	Databases SQL	3	
ITS 280	Computer Repair	4	
ITS 224	Intro to Linux	3	CSCI 100
MART 145	Web Design	3	
<b>Third Semester (14 Credits)</b>			
COMX 106	COMM in a Dynamic Workplace	2	
CSCI 121	Program w/Java II	4	CSCI 111
CSCI 211	Client Side Web Dev	3	CSCI 100 and MART 145
CSCI 245	Modern Data Systems	3	CSCI 111 and CSCI 240
<b>Choose one of the following:</b>			
CSCI 298	Internship or Independent Study or	2	Instructor Approval
CSCI 292	CT Elective		
<b>Fourth Semester (15 Credits)</b>			
CSCI 206	.NET Applications	4	CSCI 111 and CSCI 240
CSCI 221	Systems Analysis & Design	4	CSCI 240 and WRIT 101/121T
CSCI 257	Web Services	3	CSCI 111 and CSCI 240
CSCI 276	Application Security	2	CSCI 111 and CSCI 240
CSCI 299	Capstone	2	CSCI-194

Updated 5/15/2020

*The suggested sequence in this catalog is for students entering in the fall semester. Please see your advisor for a suggested spring entry sequence.*

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# Diesel Technology

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## Diesel Technology A.A.S.

### Associate of Applied Science

Diesel Technology prepares the student to enter various segments of the diesel repair industry as an entry-level technician. This includes, but is not limited to, the agricultural, the industrial equipment, and the heavy-duty diesel truck repair industry. This program provides comprehensive training in maintenance, diagnosis, and repair of related electrical/electronic systems, mobile hydraulic systems, manual and hydraulic drive trains, brakes, air systems, diesel engines, general maintenance, alignment and undercarriages, and HVAC systems as used in equipment common to the diesel repair industry. Major placement areas for the Diesel Technology graduate are agriculture and truck dealerships, truck fleets, construction, mining, oil exploration companies, farms and ranches, and independent truck repair shops.

Students will need professional tools to gain employment upon graduation; therefore, they are required to purchase a tool set as outlined in the tool section. Students are required to purchase school-approved coveralls and red rags for use in the shops and are responsible for a cleaning fee each semester.

#### Program Outcomes

- Demonstrate the ability to safely work in a shop environment
- Demonstrate their work ethic and professionalism
- Demonstrate their understanding of diesel systems operation and function of components
- Demonstrate the ability to properly diagnose the system and perform the proper repairs
- Demonstrate their ability to work in a live shop environment by interacting with customers, diagnosing and repairing a multitude of failures, working well with other students and properly completing work orders

*Note: Upon admission to the Diesel Technology Program, students are required to purchase a tool set as outlined in the tool section of this catalog. Students are required to purchase school-approved shirts and red rags for use in the shops and are responsible for a cleaning fee each semester.*

#### Required Courses – 72 Credits

Course #	Course Title	CR	Pre - Requisites
<b>First Semester (18 Credits)</b>			
DST 108	Industrial Practices	3	
DST 112	Electrical	5	
DST 142	Hydraulics	7	DST112
M 111T	Technical Math	3	Co-req DST 142
<b>Second Semester (17 Credits)</b>			
DST 145	Diesel Engine Repair	5	DST112 and DST142
DST 240	HD Manual Drive Trains	5	DST112 and DST142
DST 245	HD Hydraulic Drive Trains	3	DST112 and DST142
DST 107	Precision Measurement	1	DST112
WRIT 121T	Intro to Tech Writing	3	WRIT 096 if placement score indicates such
<b>Third Semester (18 Credits)</b>			
DST 200	Diesel Engine Performance	6	DST112 and DST145
DST 210	Diesel Maintenance Practices	5	DST112
DST 255	HD Brakes and Undercarriage	7	DST112
<b>Fourth Semester (19 Credits)</b>			
DST 130	Heating and Air Conditioning	4	DST112
DST 211	Electronic Systems	6	DST 112
DST 265	Applied Lab Experience	3	M111T, WRIT 121T, DST 200, DST 210, DST 255
DST 295	Applied Field Work	4	M111T, WRIT 121T, DST 200, DST 210, DST 255
COMX 106	Communicating in a Dynamic Workplace	2	

*The suggested sequence in this catalog is for students entering in the fall semester. Please see your advisor for a suggested spring entry sequence. Updated 5/15/2020.*



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# Diesel Technology

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## Diesel Technology C.A.S. – 41 Credits Certificate of Applied Science

*Note: Upon admission to the Diesel Technology Program, students are required to purchase a tool set as outlined in the tool section of this catalog. Students are required to purchase school-approved shirts and red rags for use in the shops and are responsible for a cleaning fee each semester.*

Please see the Helena College website for gainful employment information related to this program:

<http://HelenaCollege.edu/academics/programs/diesel/default.aspx>

### Required Courses

Course #	Course Title	CR	Pre - Requisites
<b>First Semester (22 Credits)</b>			
DST 108	Industrial Practices	3	
DST 112	Electrical	5	
HEO 100	Commercial Truck Driver	4	
DST 142	Hydraulics	7	DST 112
M 111T	Technical Math	3	Co-req DST 142
<b>Second Semester (19 Credits)</b>			
DST 107	Precision Measurement	1	DST112
DST 145	Diesel Engine Repair	5	DST112 and DST142
DST 240	HD Manual Drive Trains	5	DST112 and DST142
DST 245	HD Hydraulic Drive Trains	3	DST112 and DST142
WRIT 121T	Intro to Tech Writing	3	
COMX 106	Communicating in a Dynamic Workplace	2	

Updated 5/15/2020

*The suggested sequence in this catalog is for students entering in the fall semester. Please see your advisor for a suggested spring entry sequence.*

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# Fire & Rescue \*\*

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## Fire & Rescue A.A.S. Associate of Applied Science

**\*\* Helena College Fire and Rescue Associate of Applied Science is currently on pause for a curriculum review. Registration for program classes will begin again in Fall of 2021. For more information, please contact Tammy Burke, Executive Director of Career Technical Education at [tammy.burke@helenacollege.edu](mailto:tammy.burke@helenacollege.edu) or call 406-447-6350.**

Students in this program will graduate with an Associate of Applied Science Degree in Fire & Rescue. The program will provide applied entry-level career training for fire fighters and will enhance on-going training for current protective services professionals in Montana and the western states. This program is accredited by the International Fire Service Accreditation Congress (IFSAC).

Fire & Rescue courses concentrate on training in fire behavior, extinguishing agents, apparatus, tactics, rescue, and safety. Students will experience live fire situations in training mockups and will be able to enter careers in community-based fire departments, industrial fire brigades, airport fire brigades, and wildland fire agencies.

Students taking math and writing on the Missoula College University of Montana campus will take the equivalent courses of WRIT121 Introduction to Technical Writing (3 credits); M111T Technical Mathematics (3 credits); and COMX106.

Students are required to pass a physical exam performed by the student's physician (the physical form is available through Admissions and Records) and the physical agility test. Students must successfully complete the following physical agility test, within a one and one-half hours' timeframe, before being allowed to register for Fire & Rescue classes. The required physical agility test will be offered at fall orientation programs. Fire & Rescue applicants will be notified of specific testing and orientation dates.

The physical agility test includes:

- One-mile-run under 10 minutes
- Fifty sit-ups under two minutes
- Twenty-five push-ups under two minutes
- Lift and drag a 175-pound mannequin 50 feet
- Climb a 24-foot ladder

*These meet minimum standards as set forth under the guidelines of the National Fire Protection Association Standards 1500, 1582, and 1901.*

### Program Outcomes

- Apply the principles of professional conduct by displaying a positive work ethic, flexibility, teamwork, physical fitness, safety consciousness, and sensitivity to diversity.
- Demonstrate required understanding, knowledge, and skills in each disciplinary area of emergency services operations related to the Fire & Rescue service.
- Operate safely and effectively during emergency response simulations and while performing duties during collaboration with or under general supervision of participating external agencies.
- Demonstrate quantitative literacy related to Fire & Rescue operations.
- Communicate effectively and coherently, both in written and verbal formats, while participating in non-emergent and emergent situations

### Requirements for ECP130 Emergency Medical Technician and ECP133 Advanced Emergency Medical Technician

Students are required to have the Hepatitis B vaccine, a current (within six months) test for tuberculosis, and a background check. Students will be provided information regarding background checks on the first day of the course.

# Fire & Rescue \*\*

## Fire & Rescue A.A.S.

**\*\* Helena College Fire and Rescue Associate of Applied Science is currently on pause for a curriculum review. Registration for program classes will begin again in Fall of 2021.**

### Required Courses

<i>Special Requirements: Successfully Passing Physical Exam, Agility Test, &amp; Criminal Background Check</i>			
Course #	Course Title	CR	Pre - Requisites
<b>First Semester (18 credits)</b>			
ECP 130	Emergency Medical Technician	5	Hepatitis B Vaccines, Tuberculosis test (current or within past six months) and Criminal Background Check
FIRE 101	Intro to Fire Service	3	
FIRE 102	Intro to Fire Service II	3	Co-requisite FIRE 101
FIRE 103	Fire Fighter Safety	3	
FIRE 107	Personal Physical Fitness I	1	
M 111T or M105 or higher	Technical Math or MUS College level transferrable math course	3	
<b>Second Semester (18 credits)</b>			
FIRE 106	Wildland Fire Fighting	3	
FIRE 108	Personal Physical Fitness II	1	
FIRE 110	Hazardous Materials	3	
FIRE 120	Emergency Services Customer Service	2	
FIRE 180	Incident Command	2	
FIRE 125	Emergency Equipment Maintenance	2	
FIRE 131	Fire Apparatus & Hydraulics	3	
FIRE 140	Fire Fighting Tactics & Strategies	3	
<b>Third Semester (18 credits)</b>			
FIRE 275	Fire Service Instructor	2	
FIRE 234	Fire Protection Systems	3	
FIRE 241	Fire Inspection	3	
FIRE 242	Rescue	3	FIRE 101 and FIRE 103
FIRE 255	Fire Investigation	3	Successful completion of first year Fire & Rescue program courses.
FIRE 261	Building Construction for Fire Protection	1	
WRIT 121T	Technical Writing	3	WRIT 096 if placement score indicates such
<b>Fourth Semester (17 credits)</b>			
FIRE 210	Aircraft Rescue & Firefighting Basic Training (ARFF)	2	Students must be physically able to secure SCBA's, perform physically demanding tasks, and supply their own NFPA approved clothing.
FIRE 215	Fire Streams	2	FIRE 131
FIRE 225	Fire Officer	2	FIRE 120
FIRE 232	Basic Wildland Supervision	2	FIRE 106
FIRE 250	Fire Ground Operations	3	FIRE 101, 103, 131, 140
FIRE 270	Fire Prevention	2	
FIRE 288 or FIRE 289	Capstone or Fire Service Internship	2	FIRE 101 FIRE 101
COMX 106	Communicating in a Dynamic Workplace	2	

*\*FIRE289 – Fire Service Internship may be substituted for FIRE288 – Capstone. Must meet acceptance requirements. The suggested sequence in this catalog is for students entering in the fall semester. Please see your advisor for a suggested spring entry sequence.*

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# Metals Technology

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## **Metals Technology A.A.S.**

### **Associate of Applied Science**

*Note: Students may begin their instruction in the two-year Metals Technology program depending upon the space available; in either the computer aided manufacturing or the welding area.*

Metals Technology is designed to prepare students as entry-level technicians in many areas, including automotive machining, tool and die making, mold making, job shop machinist, gun smithing, lay-out and inspection welding, new construction welder, and fabrication. Students will study machining processes and procedures, properties of metals, blueprint reading, and inspection techniques. Welding skills (including practical, theoretical, and technical training) are taught using oxyacetylene, manual stick electrode, semiautomatic Mig, Tig (Heliarc), dualshield Mig, and various additional processes. Miller Electric has chosen Helena College as one of its regional training centers. Therefore, students will receive training on the latest state-of-the-art equipment in Mig, Tig (Heliarc), and Stick Electrode. Students will work from blueprints, follow exact specifications, and apply practical shop math to accomplish the required tasks. Much of the lab time in both areas will be used for shop project work.

An educational background in mechanical drawing, shop math, welding, and mechanical welding is helpful. Students are required to have a basic set of tools upon entrance to the program as outlined in the tool section of this catalog.

#### **Program Outcomes**

- Perform machining operations to exacting tolerances common in industry.
- Prepare and demonstrate cutting tool applications.
- Prepare, setup, and operate precision manufacturing equipment.
- Interpret and create various blueprint types and information.
- Demonstrate and complete machine and tooling maintenance.

*Note: Upon admission to the Metals Technology Program, students are required to purchase a tool set as outlined in the tool section of this catalog. Students are required to purchase school-approved shirts and red rags for use in the shops and are responsible for a cleaning fee each semester.*

## Metals Technology A.A.S. – 69 Credits

### Required Coursework

Course #	Course Title	CR	Pre - Requisites
<b>First Semester (18 Credits)</b>			
MCH 240	Metallurgy	2	
MCH130	Machine Shop	3	M 111T (co-req)
MCH132	Introduction to Engine Lathes	5	
MCH134	Introduction to Mills	5	MCH 130 (co-req)
M111T	Technical Mathematics	3	MCH 130 (co-req)
<b>Second Semester (19 Credits)</b>			
MCH 136	Advanced Lathes	5	First semester MCH courses and M111T
MCH 137	Advanced Mills	5	First semester MCH courses and M111T
MCH 139	Grinding Applications	2	First semester MCH courses and M111T
DDSN 135	Solidworks	2	First semester MCH courses and M111T
MCH 245	Shop Practices	2	First semester MCH courses and M111T
WRIT 121T	Intro to Tech Writing	3	
COMX 106	Communicating in a Dynamic Workplace	2	
<b>Third Semester (17 Credits)</b>			
WLDG 107	Industrial Safety	2	
WLDG 112	Cutting Processes	3	WLDG 107 (co-req)
WLDG 135	GMAW Theory and Practical Appl	5	WLDG 107 (co-req)
WLDG 181	SMAW Theory and Practical Appl	5	
<b>Fourth Semester (15 Credits)</b>			
WLDG 137	Blueprint Reading, Layout, and Beginning Fabrication	7	3rd semester WLDG courses and M111T
WLDG 141	GTAW Theory and Practical App	4	3rd semester WLDG courses and M111T
WLDG 151	Shop Practices	3	3rd semester WLDG courses and M111T

*\*If students are contemplating on a C.A.S. they should take COMX 106 the first year so they will have all general education requirements completed in the first year for the C.A.S..*

Updated 5/15/2020

*The suggested sequence in this catalog is for students entering in the fall semester. Please see your advisor for a suggested spring entry sequence.*

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# Nursing

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The nursing curricula prepares graduates to function as members of the health care team in various health care environments. The curricula focuses on preparation for employment and articulation. The nursing programs are approved by the Montana State Board of Nursing.

The nursing program consists of a 3-semester Certificate of Applied Science Practical Nursing (LPN) program and a 5-semester Associate of Science Registered Nursing (ASRN) program.

## **Program Outcomes for LPN and RN students:**

- Graduates will meet or exceed the national average for first time takers for the NCLEX-PN (National Council Licensure Examination for Practical Nurses) and NCLEX-RN.
- Eighty percent (80%) of students admitted to the program will complete the program within the allotted time (2-4 semesters).
- Ninety (90%) of graduates actively seeking employment will be employed within one year of graduation.
- Ninety (90%) of the surveys returned by graduates will indicate that they are satisfied with their education.
- Ninety (90%) of the surveys returned by employers will indicate satisfaction with the graduate's performance

## **Nursing Programs**

The nursing programs consist of a 3-semester Certificate of Applied Science in Practical Nursing and a 5-semester Associate of Science in Registered Nursing. Included in the 5 semester ASRN program is an option for current LPN's who want to get their Associate of Science in Registered Nursing degree to apply for the 3 semester LPN Bridge Curriculum, which is filled due to attrition only. The Helena College RN Program is ACEN (Accreditation Commission for Education in Nursing) accredited.

All students applying for the LPN Certificate of Applied Science will be required to obtain a 2.65 GPA in prerequisite courses and score 65 or higher on the TEAS test. LPNs are admitted once a year in the Spring semester. Applications are accepted the last Monday of November through the second Monday of December. Please see the Nursing Department for more detailed information on the application process.

Helena College Nursing also offers a 3-semester LPN Bridge Curriculum for those you are current LPNs and want to get their Associate of Science in Registered Nursing degree. In order for students to be eligible for this program, the student must have an LPN license with at least one-year experience as an LPN and have completed the 5 pre-requisite classes and all other requirements for admission. Acceptance into the LPN Bridge Curriculum is by attrition only. Please see the Nursing Department for more information on the admission process into this program.

The 5-semester Associate of Science Registered Nursing program does an application once a year in the Spring for both the Fall and Spring enrollment and admits sixteen (16) students in the Fall and 8 students in the Spring. All students applying to the 5-semester Associate of Science Degree will be required to have all four pre-RN prerequisites completed with a 2.75 GPA. Students are required to get a 70% or higher on the TEAS test. The application process will be opened from the last Monday of April thru the second Monday of May each year. Please see the Nursing department for more detailed information on the application process.

Admission to the program also requires completion of the Helena College application for admission and the nursing program application. Nursing applications are available through the nursing department at the Donaldson Campus of Helena College. Deadlines can be obtained from the nursing department and will be posted on the webpage. A student may apply while enrolled in the prerequisite courses with acceptance to the program to be determined after the current completed semester grades are finalized. A general physical examination is part of the application process as well as all immunization records, including tuberculosis testing using the PPD or chest x-ray; Hepatitis B vaccine (a series of three injections); MMR series (those born before 1956 who did not receive the MMR will have to complete a titer); illness or vaccination for Varicella (chicken pox); Tetanus; and Hep C.

The RN applicant will be required to write a paper in APA format as part of the application criteria. Information about this paper can be obtained from the Nursing Department.

A student must maintain a "C" or better in each of the courses required and complete each semester prior to progressing to the next semester. After the student is accepted into the nursing program, he/she must provide proof of current CPR for the Health Care Provider and a criminal background check.

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# Nursing

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## **Licensed Practical Nursing C.A.S. Certificate of Applied Science**

The practical nurse uses specialized knowledge and skills that meet the health care needs of people in a variety of settings under the direction of qualified health professions. The curriculum focuses on preparation for employment. Students learn practical nursing skills through independent study, lectures, simulation demonstrations, and practice in the skills lab. Under instructor supervision, students also provide patient care in a variety of health care settings. The program is approved by the Montana State Board of Nursing.

Graduates of the program are eligible to apply for the National Council of Licensing Examination (NCLEX) LPN licensure examination from the Montana State Board of Nursing. Upon passing the examination, the graduate becomes a Licensed Practical Nurse, LPN. After licensure, graduates typically find employment in hospitals, long-term care facilities, physician offices, clinics, and other health care agencies.

The LPN program will admit 8 students once a year in the Spring semester. The student will complete the program in the Fall semester.

Admission requires a student successfully completes the pre-requisite coursework with a 2.65 GPA or better and 65 or higher TEAS test score.

A general physical examination is part of the application process as well as all immunization records, including tuberculosis testing using the PPD or chest x-ray; Hepatitis B vaccine (a series of three injections); MMR series (those born before 1956 who did not receive the MMR will have to complete a titer); illness or vaccination for Varicella (chicken pox); Tetanus; and Hep C.

A student must maintain a “C” or better in each of the courses required and complete each semester prior to progressing to the next semester. After the student is accepted into the nursing program, he/she must provide proof of current CPR for the Health Care Provider and a criminal background check.

### **Student Achievement Outcome Data**

- NCLEX pass rate for Practical Nursing: 96%
- Retention/Completion rate for Practical Nursing: 100%
- Job placement rate for Practical Nursing (within 6 months of graduation): 100%

Please see the Helena College website for gainful employment information related to this program:

<http://HelenaCollege.edu/academics/programs/nursing/default.aspx>

## Practical Nursing C.A.S. – 40 Credits

Please see the Helena College website for gainful employment information related to this program:

[http://HelenaCollege.edu/academics/programs/acc\\_bus/default.aspx](http://HelenaCollege.edu/academics/programs/acc_bus/default.aspx)

### Required Courses

Course #	Course Title	CR	Pre - Requisites
<b>First Semester (13 Credits)</b>			
<b>Prerequisite Courses</b>			
BIOH 104	Basic Human Biology	3	
BIOH 105	Basic Human Biology Lab	1	
PSYX 100	Introduction to Psychology	3	
WRIT 101	College Writing I	3	
M 120	Mathematics for Healthcare Application	3	
<b>LPN Courses – Acceptance into the program is required to register for the following semesters.</b>			
<b>Second Semester (14 Credits)</b>			
NRSG 130	Fundamentals of Nursing	3	
NRSG 131	Fundamentals of Nursing Lab	3	
NRSG 135	Nursing Pharmacology	3	
NRSG 136	Nursing Pharmacology Lab	1	
NRSG 152	Gerontology and Community Nursing	2	
NRSG 153	Gerontology and Community Nursing Clinical	2	
<b>Third Semester (13 Credits)</b>			
NRSG 140	Adult Health Nursing	4	
NRSG 141	Adult Health Nursing Clinical	2	
NRSG 142	Nursing Care of Women and Children	3	
NRSG 143	Nursing Care of Women and Children Clinical	1	
NRSG 148	Leadership Issues for Practical Nurses	2	
NRSG 149	Leadership Issues for Practical Nurses Clinical	1	

*The suggested sequence in this catalog is for students entering in the fall semester. Please see your advisor for a suggested spring entry sequence. Updated 5/15/2020*



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# Nursing

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## **Registered Nursing A.S.R.N. Associate of Science Registered Nursing**

*(5-Semester)*

The Associate of Science degree program prepares graduates to function as members and leaders of health care teams in various health care environments. The curriculum focuses on preparation for employment. Graduates of the program are eligible to apply for the NCLEX-RN licensure examination from the Montana State Board of Nursing. After passing the examination, the graduate becomes a Registered Nurse (RN). The Associate of Science Registered Nursing degree program is ACEN Accredited.

The Associate of Science program is a 5-semester curriculum. 16 students will be admitted in this program in Fall and 8 students in the Spring.

Admission to the program also requires completion of the Helena College application for admission and the nursing program application. Nursing applications are available through the nursing department at the Donaldson Campus of Helena College. Deadlines can be obtained from the nursing department and will be posted on the webpage. A regular student may apply while enrolled in the prerequisite courses with acceptance to the program to be determined after the current completed semester grades are finalized. A general physical examination is part of the application process as well as all immunization records, including tuberculosis testing using the PPD or chest x-ray; Hepatitis B vaccine (a series of three injections); MMR series (those born before 1956 who did not receive the MMR will have to complete a titer); illness or vaccination for Varicella (chicken pox); Polio, Tetanus, and Hep C. A 70% or above on the TEAS exam is required. A regular RN student must obtain a 2.75 GPA in the pre-requisite course work in order to apply to the regular cohort of the RN program.

In addition to the above, LPN Bridge curriculum students are required to have their LPN license, three (3) Letters of Reference, and have at least a year's experience as an LPN.

The RN applicant will be required to write a paper in APA format as part of the application criteria. Information about this paper can be obtained from the Nursing Department.

A student must maintain a "C" or better in each of the courses required and complete each semester prior to progressing to the next semester. After the student is accepted into the nursing program, he/she must provide proof of current CPR for the Health Care Provider and a criminal background check.

### **Student Achievement Outcome Data**

- NCLEX pass rate for Registered Nursing program: 100%
- Retention/Completion rate for Registered Nursing program: 91%
- Job placement rate for Registered Nursing program (within 6 months of graduation): 100%

## Registered Nursing A.S.R.N.

### Required Courses

Course #	Course Title	CR	Pre - Requisites
<b>First Semester (14 Credits)</b>			
<b>Prerequisite Courses</b>			
BIOH 201	Anatomy & Physiology with Lab	4	
M 121	College Algebra	3	
CHMY 121	Chemistry with Lab	4	
WRIT 101	College Writing I	3	
<b>ASRN Courses – Acceptance into the program is required to register for the following semesters.</b>			
<b>Second Semester (15 Credits)</b>			
BIOH 211	Anatomy and Physiology II W/Lab	4	BIOH 211 May be taken prior
NRSB 230	Nursing Pharmacology	3	
NRSB 231	Nursing Pharmacology Lab	2	
NRSB 232	Foundations of Nursing	3	
NRSB 233	Foundations of Nursing Lab	3	
<b>Third Semester (14 Credits)</b>			
NRSB 256	Pathophysiology	3	
NRSB 234	Health & Illness - Adult Nursing I	3	
NRSB 235	Health & Illness - Adult Nursing I Clinical	2	
NRSB 236	Health & Illness of Maternal Nursing	2	
NRSB 237	Health & Illness - Maternal Nursing Clinical	1	
PSYX 100	Intro to Psychology (Ctrl) ▾	3	PSYX100 May be taken prior
<b>Fourth Semester (15 Credits)</b>			
NRSB 244	Health & Illness – Adult Nursing II	3	
NRSB 245	Health & Illness – Adult Nursing II Clinical	2	
NRSB 254	Mental Health Concepts	3	
NRSB 255	Mental Health Concepts Clinical	1	
NRSB 246	Health & Illness of Child/Fam Nursing	2	
NRSB 247	Health & Illness Pediatric Clinical	1	
SOCI 101	Intro to Sociology	3	SOCI 101 May be taken prior
<b>Fifth Semester (14 Credits)</b>			
NRSB 259	Health & Illness of Adult Nursing III	3	
NRSB 260	Health & Illness-Adult Nursing III Lab	1	
NRSB 261	Health & Illness-Adult Nursing III Clinical	2	
NRSB 266	Managing Client Care for the RN	2	
NRSB 267	Managing Client Care for RN Clinical	2	
BIOM 250	Microbiology W/Lab	4	BIOM 250 May be taken prior

# Nursing

## L.P.N. Bridge Curriculum R.N. Cohort Required Courses

Course #	Course Title	CR	Pre - Requisites
<b>First Semester (21 credits)</b>			
<b>Prerequisite Courses</b>			
BIOH 201	Anatomy & Physiology I w/ Lab	4	
CHMY 121	Intro to General Chemistry	3	
CHMY 122	Intro to General Chemistry Lab	1	
WRIT 101	College Writing I	3	
M 121	College Algebra	3	
BIOH 211	Anatomy & Physiology II w/ Lab	4	
PSYX 100	Intro to Psychology	3	
<b>Application to Nursing Program (LPN license required)</b>			
<b>Second Semester (6 credits)</b>			
NRSG 256	Pathophysiology	3	
NRSG 236	Health & Illness of Maternal Nursing	2	
NRSG 237	Health & Illness of Maternal Nursing Clinical	1	
<b>Third Semester (15 credits)</b>			
NRSG 244	Adult Nursing II	3	
NRSG 245	Adult Nursing II Clinical	2	
NRSG 254	Mental Health Concepts	3	
NRSG 255	Mental Health Concepts Clinical	1	
NRSG 246	Health & Illness of Child & Family Nursing	2	
NRSG 247	Health & Illness of Child & Family Nursing Clinical	1	
SOCI 101	Intro to Sociology	3	May be taken prior
<b>Fourth Semester (14 credits)</b>			
NRSG 259	Adult Nursing III	3	
NRSG 260	Adult Nursing III Lab	1	
NRSG 261	Adult Nursing III Clinical	2	
NRSG 266	Managing Client Care for the RN	2	
NRSG 267	Managing Client Care for the RN Clinical	2	
BIOM 250	Microbiology for Health Sciences	3	May be taken prior
BIOM 251	Microbiology for Health Sciences Lab	1	May be taken prior

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## Administrative Support & Management

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***\*\*The Administrative Support & Management program is currently on Moratorium and is not accepting new students. Please contact the Executive Director of General Education & Transfer at 406-447-6930 with any questions.***

**The following degrees under the Administrative Support & Management program are no longer offered at Helena College:**

1. Administrative Support Management A.A.S. Associate of Applied Science
2. Medical Administrative Support Management A.A.S. Associate of Applied Science
3. Administrative Support C.A.S. Certificate of Applied Science
4. Legal Administrative Support C.A.S. Certificate of Applied Science
5. Medical Administrative Support C.A.S. Certificate of Applied Science

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# Industrial Welding & Metal Fabrication

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## Industrial Welding & Metal Fabrication A.A.S. – 70 Credits Associate of Applied Science

The Industrial Welding and Metal Fabrication A.A.S. degree program has been designed to provide students with a comprehensive education allowing them to be successful in the diverse world of welding and metal fabrication. To meet the many and varied demands of this industry, Helena College has designed a program that enables the graduating student to find employment in a wide spectrum of areas with high earning potential.

The curriculum includes extensive hands on experience –more than 1500 hours for the associate degree –utilizing the newest equipment used in industry, and includes coursework in computation, writing and human relationships. Upon completion of the Industrial Welding and Metal Fabrication program curriculum, the student will earn an Associate of Applied Science Degree.

Fabrication equipment, welding machines and support equipment are now all supported with software. Helena College students receive instruction on equipment including CNC plasma tables with support software, CNC press brake with support software, ironworker, shears, and welding positioners. As one of 10 nationwide regional training facilities for Miller Electric, Helena College students are afforded advanced opportunities using their newest technologies.

With an emphasis on safety, students will receive hands-on, theoretical, and technical training covering shielded metal arc welding(SMAW), flux cored arc welding(FCAW), gas metal arc welding(GMAW), gas metal arc welding pulse(GMAW-P), gas tungsten arc welding(GTAW), orbital GTAW, and submerged arc welding(SAW) processes along with courses in fabrication techniques. Plasma arc, oxy-fuel and carbon arc cutting processes are also examined in great detail. Under the guidance of experienced welding professionals, students can build skills needed for an outstanding career in welding, including strong fitting and fabrication skills gained through extensive hands on training including the fabrication of various projects.

The Helena College Welding Program is proudly affiliated with the American Welding Society as an Institutional Educational Member beginning Spring Semester 2013. We hold our students to the highest standards set by the American Welding Society.

### Program Outcomes

- Practice industry standards for safety and compliance
  - Demonstrate proper applications for different cutting processes and equipment
  - Demonstrate proper applications for different welding processes, codes and procedures
  - Interpret industrial blueprints
  - Enter the workforce with entry level industry skills
  - Identify and demonstrate the proper use of manufacturing equipment
  - Demonstrate proper applications for advanced cutting and welding processes and equipment
  - Demonstrate advanced fabrication skills

Note: Upon admission to the Industrial Welding & Metal Fabrication Program, students are required to purchase a tool set as outlined in the tool section of this catalog.



*Note: Upon admission to the Industrial Welding & Metal Fabrication Program, students are required to purchase a tool set as outlined in the tool section of this catalog. Students are required to purchase school-approved shirts and red rags for use in the shops and are responsible for a cleaning fee each semester.*

## Industrial Welding & Metal Fabrication A.A.S. – 70 Credits

### Required Courses

Course #	Course Title	CR	Pre - Requisites
<b>First Semester – 18 Credits</b>			
WLDG 107	Industrial Safety for Welding	2	
WLDG 112	Cutting Processes	3	WLDG 107
WLDG 135	GMAW Theory and Practical Applications	5	WLDG 107
WLDG 181	SMAW Theory and Practical Applications	5	WLDG 107
M111T	Technical Mathematics	3	
<b>Second Semester – 20 Credits</b>			
WLDG137	Blueprint Reading, Layout and Beginning Fabrication	7	First semester WLDG courses and M111T
WLDG141	GTAW Theory and Practical Application	4	First semester WLDG courses & M111T
WLDG151	Shop Practices	4	First semester WLDG courses and M111T
WRIT 121T	Technical Writing	3	
COMX 106**	Communicating in a Dynamic Workplace	2	
<b>Third Semester – 16 Credits</b>			
Credits	Pre-requisites: Completion of First Year Courses with a C- or better		
WLDG213	Pipe Welding I Lab	6	First year courses and M111T
WLDG 246	Advanced Metal Forming/Fabrication Theory and Practical Application	5	First year courses and M111T
WLDG 257	Cutting Processes II	5	First year courses and M111T
<b>Fourth Semester – 16 Credits</b>			
WLDG 227	Advanced Joining Processes Theory and Practical Application	6	Third semester WLDG Courses
WLDG245	Metal Fabrication Design and Construction	5	Third semester WLDG courses
WLDG 299	Industrial Welding Capstone	5	Third semester WLDG courses & M111T

Updated 12/11/2020

*\*If students are contemplating on a C.A.S. or A.A.S. they should take COMX106 the first year spring semester so they will have all general education requirements completed in the first year for the C.A.S..*

*The suggested sequence in this catalog is for students entering in the fall semester. Please see your advisor for a suggested spring entry sequence.*

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# Industrial Welding & Metal Fabrication

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## Welding Technology C.A.S. – 38 Credits Certificate of Applied Science

With an emphasis on safety, students will receive extensive hands-on, theoretical, and technical training covering various Cutting and Welding Processes such as: Oxy-Fuel Cutting (OFC), Plasma Arc Cutting (PAC), Air Carbon Arc Cutting (CAC-A), Shielded Metal Arc Welding (SMAW), Flux Cored Arc Welding (FCAW), Gas Metal Arc Welding (GMAW), Gas Tungsten Arc Welding (GTAW), all while training/inspecting to the strict codes and procedures of the American Welding Society (AWS). Under the guidance of experienced welding professionals, students will demonstrate cutting and welding skills, interpret industrial blueprints and demonstrate fabrication techniques needed by entry level technicians into the industrial welding workforce. The Helena College Welding Program is proudly affiliated with the American Welding Society as an Institutional Educational Member beginning Spring Semester 2013. We hold our students to the highest standards set by the American Welding Society

### Program Outcomes

- Practice industry standards for safety and compliance
  - Demonstrate proper applications for different cutting processes and equipment
  - Demonstrate proper applications for different welding processes, codes and procedures
  - Interpret industrial blueprints
  - Enter the workforce with entry level industry skills

Note: Upon admission to the Industrial Welding & Metal Fabrication Program, students are required to purchase a tool set as outlined in the tool section of this catalog.

Please see the Helena College website for gainful employment information related to this program:

<http://HelenaCollege.edu/academics/programs/welding/default.aspx>

### Required Courses

Course #	Course Title	CR	Pre - Requisites
<b>First Semester (18 credits)</b>			
WLDG107	Industrial Safety for Welding	2	
WLDG112	Cutting Processes	3	WLDG 107
WLDG135	GMAW Theory and Practical Application	5	WLDG 107
WLDG181	SMAW Theory and Practical Application	5	WLDG 107
M111T	Technical Mathematics	3	
<b>Second Semester (20 credits)</b>			
WLDG137	Blueprint Reading, Layout and Beginning Fabrication	7	First semester WLDG courses and M111T
WLDG141	GTAW Theory and Practical Application	4	First semester WLDG courses and M111T
WLDG151	Shop Practices	4	First semester WLDG courses and M111T
WRIT 121T	Technical Writing	3	
COMX 106	Communicating in a Dynamic Workplace	2	

Updated 12/11/2020

*The suggested sequence in this catalog is for students entering in the fall semester. Please see your advisor for a suggested spring entry sequence.*

*Note: Upon admission to the Welding Technology Program, students are required to purchase a tool set as outlined in the tool section of this catalog. Students are required to purchase school-approved shirts and red rags for use in the shops and are responsible for a cleaning fee each semester.*

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## Industrial Welding & Metal Fabrication

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**Sheet Metal Apprenticeship C.A.S.**  
**Certificate of Applied Science**

This program is not accepting students at this time.





## Direct Transfer Opportunities

UM – Davidson Honors College with Latin Honors  
UM – Elementary Education, K-8  
UM – Pre-Pharmacy  
UM – Social Work  
UM – School of Business Administration  
Montana Tech – Accounting / Business Technology  
Montana Tech – Business & Information Technology  
Montana Tech – RN to BSN Completion Program  
WGU – RN to BSN Completion Program  
MSU – Jake Jabs College of Business & Entrepreneurship  
MSU Billings – Health Administration  
MSU Northern – Criminal Justice

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# UM – Davidson Honors College with Latin Honors

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## **Bachelor Degree Program Via Articulation Agreement with the UM Davidson Honors College**

Contact: General Education Division Director, 406-447-6930

The purpose of this agreement is to provide an articulation process whereby a student accepted into the above mentioned program of study, cooperatively administered by Helena College–UM (Helena) and the University of Montana (UM), may receive full college credit for a program of study successfully completed during attendance at the two institutions. The goals of the articulation process are to: (a) provide students with a seamless transition between Helena and the Davidson Honors College at UM; (b) allow students to complete all first- and second-year requirements of the Davidson Honors College program on the Helena campus, and (c) provide both institutions with mechanisms to ease the transfer process for students who intend to pursue a Bachelor’s degree with the University Scholar distinction at UM.

- Students applying for admission to the Helena College Scholars program should show clear evidence of academic talent and motivation. Generally, a minimum high school GPA of 3.5 is expected, as well as exemplary ACT or SAT scores. There are no absolute criteria, and highly motivated students from a variety of backgrounds are encouraged to apply. Applications are welcomed from older or non-traditional students, international students and students from varied racial and ethnic backgrounds.
- Once admitted to the Scholars program, students must maintain a minimum 3.0 GPA. Probation letters are sent to any student whose cumulative GPA falls below 3.0; students with GPAs below 3.0 for two semesters are suspended from the program and will become ineligible to reapply.
- At Helena College, students will take and successfully complete HONR 121-Ways of Knowing, with a grade of B- or higher.
- At Helena College, students will successfully complete at least three (3) courses with Honors designation. One of these courses may be selected from among the following experiential learning course types: Service Learning Courses, Internships, Independent Study, or Study Abroad.
- Students must select and complete an Associate of Arts or an Associate of Science degree plan while at Helena College, including fulfillment of all degree requirements. By not later than December 31st of the term prior to the student’s intended transfer to UM, participants will complete and submit the Application for Admission to the Davidson Honors College.
- Upon successful completion of the above requirements the student will be awarded an Associate’s degree with special recognition of their status as an Honors Scholar as well as the appropriate “with Honors” or “with Highest Honors” designation based upon their cumulative GPA as described in the Helena College catalog in the section titled “Graduation Honors.”
- Students who have successfully completed EACH of the above requirements will be granted admission to the Davidson Honors College at UM with junior standing.
- It is noted that except in cases where a specific articulation agreement exists between Helena College and the University of Montana for a particular bachelor’s degree program, completion of the plan of study and the above-referenced requirements at Helena College applies only to the Davidson Honors College program, and does not necessarily imply admission with junior standing nor completion of all lower level courses required for the specific major plan of study the student wishes to pursue at UM.



# UM – Elementary Education, K-8

## A.S. Advising option in Elementary Education. to B.A. - 61 Credits

### Associate of Science to Bachelor of Arts

Via Articulation Agreement with UM Phyllis J. Washington College of Education and Human Sciences

Contact: Robyn Kiesling, [robyn.kiesling@helenacollege.edu](mailto:robyn.kiesling@helenacollege.edu), 406-447-6900

The Associate of Science (A.S.) advising option in Elementary Education at Helena College is designed specifically for articulation to the University of Montana’s Phyllis J. Washington College of Education and Human Sciences for a Bachelor of Arts (B.A.) in K-8 Elementary Education. Upon completion of the A.S. degree, students are eligible to apply for admissions into UM’s Teacher Education Program, but not guaranteed admission. Students must maintain a cumulative GPA of 2.75 in all courses and state licensure core content courses, and earn a grade of “C-“ or better in all courses. Students accepted into UM’s Teacher Education Program will enter with junior standing and complete coursework through UM to obtain a B.A. in K-8 Elementary Education.

UM’s Level 1, 2, and 3 courses during the junior and senior years will be delivered remotely via synchronous web streaming to a classroom at Helena College, thus allowing students to participate in real-time lectures and classroom discussions without requiring their physical presence on the UM campus in Missoula. Also listed under University Center Partnerships.

### Required Courses

Course #	Course Title	Sem Offered	Cr	Pre - Requisites
<b>1<sup>st</sup> Semester – 15/16 credits (Fall)</b>				
BIOB 101 *H,S	Discover Biology with lab		4	
M 132 *S	Numbers and Operations for K-8 Teachers		3	Placement or M092
WRIT 101 *S,H	College Writing I		3	Placement or WRIT 096
Select two of the spring courses from Elementary Education Course Rotation Below				
<b>2<sup>nd</sup> Semester – 15/16 credits (Spring)</b>				
COMX 111 or 115 *H	Intro to Public Speaking or Interpersonal Communication	F,S	3	
LIT 110 *H	Introduction to Literature	F,S	3	
M 133 *H,S	Geometry & Geometric Measurement for K-8 Teachers	S	3	M132
Select two of the spring courses from Elementary Education Course Rotation Below				
<b>3<sup>rd</sup> Semester – 14/15 Credits (Fall)</b>				
HSTA 101 or 102 *H	American History I or II	every	3	
M 234 *S	Higher Mathematics for K-8 Teachers	F	3	M132 & (Placement or M093)
PSCI 210 *S	Introduction to American Government	F,Su	3	
Select two of the spring courses from Elementary Education Course Rotation Below				
<b>4<sup>th</sup> Semester – 15/16 credits (Spring)</b>				
Fine arts course *H	ARTZ, MUSI, or THTR course	every	3	
HSTA 255 *S	Montana History	S	3	
NASX 105 *H,S	Introduction to Native American Studies	every	3	
Select two of the spring courses from Elementary Education course Rotation Below				
<b>Possible Developmental Coursework:</b>				
M 092	Algebra I	every	2	Placement
M 093	Algebra II	every	3	Placement or M092
WRIT 096	College Writing Lab		1	Placement

\*H = Helena College Core

\*S = State Licensure Core Classes require 2.75 minimum GPA

UM’s Teacher Education Program requires a minimum overall GPA of 2.75



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# UM – Pre-Pharmacy

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## Pre-Pharmacy A.S.

### Associate of Science Transfer Degree

Via Articulation Agreement with UM Skaggs School of Pharmacy

Contact: Dr. John W. Hartman, [john.hartman@HelenaCollege.edu](mailto:john.hartman@HelenaCollege.edu), 406-447-6977.

This degree program is specifically designed for students seeking admissions into the Skaggs School of Pharmacy at the University of Montana–Missoula. Upon completion of this degree, students desiring a professional (Pharm.D.) degree in Pharmacy Practice or Biomedical and Pharmaceutical Sciences are eligible to apply for admissions into UM-Missoula’s Skaggs School of Pharmacy.

*Note: Students in this program must also complete the Pharmacy College Admissions Test (PCAT) and complete 20 hours of volunteer or paid service in a pharmacy, or other health care, or social field. This program satisfies the two-year pre-professional requirement and offers eligibility for application to the Skaggs School of Pharmacy at the UM–Missoula and does not guarantee admission. Students must earn a grade of “C-” or better in all courses.*

*Note: Due to the competitive nature of the Pre-Pharmacy program, it is recommended that students earn a B or higher in all courses.*

### Required Courses

Course Title		Credits
<b>First Semester (15 credits)</b>		
BIOH 201 and 202	Human Anatomy & Physiology with Lab	4
CHMY 141 and 142	College Chemistry I with Lab	4
M 171	Calculus I	4
WRIT 101	College Writing	3
<b>Second Semester (14 credits)</b>		
BIOH 211 and 212	Human Anatomy and Physiology II with Lab	4
CHMY 143 and 144	College Chemistry II with Lab	4
PSYX 100 or SOCI 101		3
STAT 216	Introduction to Statistics	3
<b>Third Semester (18 credits)</b>		
COMX 111	Introduction to Public Speaking	3
CHMY 221 and 222	Organic Chemistry I with Lab	5
ECNS 201	Principles of Microeconomics	3
*Humanities/Fine Arts course		3
PHSX 205	College Physics I with Lab	4
<b>Fourth Semester (15 credits)</b>		
BIOB 260	Cellular and Molecular Biology with Lab	4
CHMY 223 and 224	Organic Chemistry II with Lab	5
*Diversity course		3
*Humanities/Fine Arts		3

*\*Selection of Humanities/Fine Arts and Diversity elective courses made with consultation of the Helena College Pre-Pharmacy advisor.*

*\*One course must meet the Cultural Heritage of American Indian (CHAI) requirements.*



# UM – Social Work

## Associate of Arts to Bachelor Via Articulation Agreement with the University of Montana

Please contact Nathan Munn for information at [nathan.munn@HelenaCollege.edu](mailto:nathan.munn@HelenaCollege.edu), or 406-447-6981

This degree program is specifically designed for students seeking admissions into the School of Social Work at the University of Montana-Missoula. Upon completion of this degree, students desiring a B.S.W. are eligible to apply for admissions into UM-Missoula's School of Social Work's fully online or Missoula-based programs.

*Note: This degree offers eligibility for application to the School of Social Work at UM-Missoula and does not guarantee admission.*

**\*Students must earn a 3.00 G.P.A between SW100 and SW200**

Course Number	Sem	Credit
<b>General Education Core (30+ credits)</b>		
<b>Natural Sciences (6+ credits)</b>		
One science with lab		
BIOH 104 (with lab)		4
<b>Mathematics (3+ credits)</b>		
M 105 or M 121		3
<b>Written Communication (3 credits)</b>		
WRIT 101		3
<b>Oral Communication (3 credits)</b>		
COMX 111 or 115		3
<b>Social &amp; Psychological Sciences/History (6 credits)</b>		
PSYX 100		3
SOCI 101		3
<b>Humanities/Fine Arts (6+ credits)</b>		
<b>Cultural Diversity (3+ credits)</b>		
PSYX 240		3

Course Number	Sem	Credit
<b>A.A. Requirements (6+ credits)</b>		
<b>One foreign language course, and any Social &amp; Psychological Science, History, Humanities, or Fine Arts course</b>		
SPNS 101 or FRCH 101		4
<b>Advising Option (24+ credits)</b>		
<b>At least 12 credits of Gen Ed core</b>		
<b>Up to 12 credits of college level non-Gen Ed</b>		
ECNS 201 or 202		3
PSCI 210		3
PSYX 230		3
PSYX 250		3
SW 100		3
SW 200		3
Elective		3
Elective		3

**Total Credits (minimum of 60)** \_\_\_\_\_

**Total General Education Core Credits:** \_\_\_\_\_

*\*Completion of one course designated as Cultural Heritage of American Indian (CHAI).*



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# UM – School of Business Administration

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## **Transfer Degree towards Bachelor Degree Via Articulation Agreement with UM School of Business Administration**

Please contact Barbara Yahvah for more information at [barbara.yahvah@HelenaCollege.edu](mailto:barbara.yahvah@HelenaCollege.edu), or 406-447-6963

### **Introduction:**

The purpose of this agreement is to provide an articulation process whereby a student completing the Associate of Science degree from Helena College University of Montana (Helena College) with the prescribed course of study contained herein may prepare for admission to the Business Administration program at The University of Montana (UM) College of to obtain a Bachelor of Science in Business Administration. The goals of the articulation process are to: (a) provide students with a seamless transition between Helena College and UM; (b) allow students to complete all the first and second year requirements of the UM College of Business Administration program on the Helena campus; and (c) provide both institutions with mechanisms to ease the transfer process for students who intend to pursue a Bachelor of Science in Business Administration degree from UM.

### **Articulation Requirements:**

1. Students must select and complete the prescribed course of study contained herein while at Helena College, including fulfillment of all degree requirements. The specific requirements are shown in Appendix A.
2. Students, must complete specific course selections within the Montana University System (MUS) core in order to fulfill the Extra-departmental Requirements of the Business Administration program, as described in Appendix A. Students who have successfully completed ALL the above requirements and who complete all published application requirements of the UM College of Business Administration are eligible to apply for admission to the College of Business Administration at UM. Having fulfilled all requirements listed and having been accepted, students would begin the Business Administration program with Junior Standing.
3. In order to ensure ongoing articulation of the programs at each institution, participants from Helena College Academic Affairs and from the UM College of Business Administration agree to meet or confer by phone annually on a mutually agreeable date not later than January 31<sup>st</sup> to review and refine the agreement and attendant advising plan (herein provided as Appendix A) as needed.
4. During the pursuit of the Associate of Science degree option, students under this agreement will be advised by Helena College faculty.

This agreement takes effect upon execution, and shall remain in effect until such time as the chief academic officer of either institution notifies the other in writing of intent to discontinue the agreement. Such notification will be provided by not later than September 1<sup>st</sup> in the academic year PRIOR to termination of the agreement.



**Associate of Science Leading to a Bachelor of Science in Business Administration Articulation with the University of Montana**

<b>General Education Core: (30 credits):</b>		
Natural Sciences with Lab	4 credits	
Natural Sciences with or without Lab	3+ credits	
Mathematics	3 credits	Students advised to take M 115 or M 121
Written Communication	3 credits	
Oral Communication	3 credits	
Social & Psychological Sciences/History	3 credits	
Social & Psychological Sciences/History	3 credits	
Humanities and Fine Arts	3 credits	Students advised to take BGEN 220
Humanities and Fine Arts	3 credits	
Cultural Diversity	3 credits	
<b>A.S. Additional Requirements: (6 credits):</b>		
Natural Science with lab	4 credits	
Any Natural Science or Mathematics course	2+ credits	Students advised to take STAT 216
<b>Advising Option: (24 credits):</b>		
ACTG 201	3 credits	
ACTG 202	3 credits	
BGEN 105	3 credits	
BGEN 235	3 credits	Substitutes for UM BGEN 361
BMIS270	3 credits	
CSCI 172	3 credits	
ECNS 201	3 credits	
ECNS 202	3 credits	
<b>Total AS Degree (60 credits)</b>		

\*Completion of one course designated as Cultural Heritage of American Indian (CHAI).

*Note: Finance Majors are required to take Applied Calculus (M162) in place of Probability & Linear Mathematics (M115). This course should be taken the student's first semester at UM-Missoula. In the semester when students will have (a) completed 60+ cumulative credits, (b) earned a C or better in all primary lower core courses, and (c) attained a 2.0 overall GPA, they will apply for admissions into the School of Business Administration.*



# Montana Tech – Accounting / Business Technology

## Transfer Degree towards Bachelor of Applied Science Via Articulation Agreement with Montana Tech UM

Please contact Barbara Yahvah for more information at [barbara.yahvah@HelenaCollege.edu](mailto:barbara.yahvah@HelenaCollege.edu), or 406-447-6963

This articulation agreement applies for the following degrees: (1) All A.A.S. degrees; (2) A.A. in Accounting Technology or Business Technology; (3) A.S. in Accounting Technology, Business Technology, or Computer Technology. Students should see their advisor to plan their transfer into B.A.S. Any specific Helena College course will only be transferred in one the following categories: (1) Block Transfer; (2) General Education Core; or (3) Business Concentration. Classes cannot be counted in more than one category. Students need to see their advisor to maximize the transferability of their classes.

Any courses that are remedial in nature, such as math courses below College Algebra, will not be counted in the block transfer credit.

- Some courses may have pre-requisites or require specific test scores for enrollment. Pre-requisite courses not listed on this agreement may not count towards a student's transfer into the bachelor's degree program.
- Minimum Credits for B.A.S. degree in Business 120 credits. Minimum of 39 upper division credits (3XX or 4XX). Minimum of 30 upper division credits, including BMGT426, must be Montana Tech credits.
- BMGT426 is the capstone course and should only be attempted during one of the last two semesters in the program.

# MontanaTech

## Accounting/Business Technology B.A.S. Required Courses

<b>General Education Core</b>			
<b>Natural Science &amp; Mathematics</b>			
M115	Probability and Linear Math	3	Helena College
M171 or STAT216	Calculus I or Statistics	3	Helena College
Natural Science & Mathematics Elective	(BIOB, BIOH, CHMY, EVSC, GEO, PHYS)	3	Helena College
Natural Science & Mathematics Elective	(ASTR w/lab, BIOB, BIOH, GEO, PHYS)	4	Helena College
<b>Written &amp; Oral Communication</b>			
WRIT101	College Writing I	3	Helena College
WRIT322	Business and Professional Writing	3	Mt Tech
<b>Social &amp; Psychological Sciences, History</b>			
ECNS203	Principles of Micro and Macro Economics	3	Helena College
Social & Psychological Sciences Elective	(Psychology, Sociology, Anthropology)	3	Helena College
<b>Humanities &amp; Fine Arts</b>			
Humanities & Fine Arts Elective	(History, Literature, Language)	3	Helena College
BGEN363	Business Ethics and Decision-Making	3	Mt Tech
<b>Business Concentration Credits required for both tracks:</b>			
ACTG201	Principles of Financial Accounting	3	Helena College
ACTG202	Principles of Managerial Accounting	3	Helena College
ACTG321	Accounting Information Systems I	3	Mt Tech
BFIN322	Business Finance	3	Mt Tech
BGEN235	Business Law I	3	Helena College/Mt Tech
BMKT225/BMKT325	Marketing/Principles of Marketing	3	Helena College/Mt Tech
BMGT235/BMGT335	Management/Management and Organization	3	Helena College/Mt Tech
BMGT426	Strategic Management	3	Mt Tech

**Management Track  
Required Courses**

<b>Required</b>			
BMGT329	Human Resource Mgmt	3+	Mt Tech
<b>Choose THREE of the following</b>			
ACTG410	Cost/Mgmt Accounting I	3+	Mt Tech
ACTG420	Cost/Mgmt Accounting II	3+	Mt Tech
BFIN459	Money, Capital Markets and Institutions	3+	Mt Tech
BGEN491	Risk and Insurance	3+	Mt Tech
BMGT322	Operations Management	3+	Mt Tech
BMGT353W	Organizational Behavior	3+	Mt Tech
BMGT448	Entrepreneurship	3+	Mt Tech
BMKT342	Marketing Research	3+	Mt Tech
BMGT3XX	Special Topics/Other	3+	Mt Tech
BMGT4XX	Special Topics/Other	3+	Mt Tech

**Accounting Track  
Required Courses**

<b>Required</b>			
ACTG301	Intermediate Accounting I	3+	Mt Tech
ACTG302	Intermediate Accounting II	3+	Mt Tech
ACTG410	Cost/Mgmt Accounting I	3+	Mt Tech
<b>Choose THREE of the following</b>			
ACTG401	Principles of Fed Taxation/Individuals	3+	Mt Tech
ACTG402	Advanced Income Tax	3+	Mt Tech
ACTG411	Auditing I	3+	Mt Tech
ACTG412	Auditing II	3+	Mt Tech
ACTG415	Governmental and Not-for-Profit Accounting I	3+	Mt Tech
ACTG420	Cost/Mgmt Accounting II	3+	Mt Tech
ACTG303	Intermediate Accounting III	3+	Mt Tech

*+Meets the upper division requirements for a B.A.S. (minimum 39 credits).*

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*Updated 9/23/19*

# Montana Tech – R.N. to B.S.N. Completion Program

## Transfer Degree towards Bachelor of Science Nursing Via Articulation Agreement with Montana Tech UM

### *One Year Completion Pathway*

For more information related to this program, please, contact:

**Montana Tech Nursing Department**

406-496-4390

<https://www.mtech.edu/academics/programs/>

**R.N. to B.S.N. Completion Program**

### Required Courses

<b>Prerequisite Non-Nursing Course Layout- can be taken at Helena College</b>		
<b>Mt Tech Program Requirement</b>	<b>Helena College Equivalent</b>	
STAT131 Introduction to Biostatistics	STAT216 Introduction to Statistics	3
PHL325 Professional Ethics	NRSG220 Fundamentals of Nursing Ethics	3
Elective	Humanities Elective (ex: LIT or HSTA courses)	3
WRIT322 Advanced Business Writing	WRIT201 College Writing II	3
<b>Admission into Junior Year Required (see Montana Tech admission criteria)</b>		
<b>Junior Year Fall Semester Course Layout (to be taken from Montana Tech) (18 credits)</b>		
NRSG356	Advanced Pathophysiology	3
NRSG325	Advanced Health Assessment	3
NRSG410	Nursing Theory	3
NRSG344	Family Nursing	3
NRSG309	Care of the Aging Client	3 (22.5 hrs clinical)
NRSG420	Nursing Research	3
<b>Senior Year Spring Semester Course Layout (to be taken from Montana Tech) (15 credits)</b>		
NRSG306	Community Health Nursing	3 (45 hrs clinical)
NRSG311	Trends and Issues in Professional Nursing	2
NRSG404	Nursing Across the Health Care Continuum	3 (22.5 hrs clinical)
NRSG485W	Nursing Leadership and Management	3 (67.5 hrs clinical)
AHS460	Electrocardiography	3

All courses are online

# MontanaTech

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# WGU – R.N. to B.S.N. Completion Program

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## Transfer Degree towards Bachelor of Science Nursing Via Articulation Agreement with Western Governors University

*One Year Completion Pathway*

For more information related to this program, please, contact:

**Western Governors University**

866-225-5948 Ext 5253

[http://www.wgu.edu/online\\_health\\_professions\\_degrees/bachelor\\_science\\_nursing2](http://www.wgu.edu/online_health_professions_degrees/bachelor_science_nursing2)

### R.N. to B.S.N. Completion Program Required Courses

<b>Prerequisite – Non-Nursing Course Layout</b>		
STAT216	Introduction to Statistics	3
PHL325	Public Speaking	3
WRIT201	College Writing II	3
Elective	Humanities Elective	3
Elective	Humanities Elective	3
<b>Approximately 31 credits will be given for the 8 pre-requisite classes taken for nursing entrance.</b>		
50 credits will be given for completion of the LPN/RN programs at Helena College. Student must have a current and valid RN license. Grading is Pass or No Pass (a pass is a B or better) CCNE accredited		
<b>First Semester – Nursing Course Layout (15 credits)</b>		
NVT2	Professional Roles and Values	3
GLT1	Growth and Development	3
GNT1	Contemporary Nursing Issues	4
HAT1	Community Health Nursing	3
HGT1	Community Health Nursing Practicum	2 (clinical)
<b>Second Semester – Nursing Course Layout (12 credits)</b>		
GRT1	Biochemistry	3
NUT1	Nursing Informatics	2
EBT1	Evidence Based Practice & Applied Nursing Research	3
KOT1	Organizational Systems and Quality Leadership	4 (clinical)



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# MSU – Jake Jabs College of Business & Entrepreneurship

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## **Transfer Degree towards Bachelor of Science via Articulation Agreement with MSU Jake Jabs College of Business & Entrepreneurship**

Please contact Barbara Yahvah for more information at [barbara.yahvah@HelenaCollege.edu](mailto:barbara.yahvah@HelenaCollege.edu), or 406-447-6963

### **Introduction:**

The purpose of this agreement is to provide an articulation process whereby a student completing the Associate of Science degree from Helena College University of Montana (Helena College) with the prescribed course of study contained herein may prepare for admission to the Jake Jabs College of Business & Entrepreneurship (JJCBE) program at Montana State University (MSU) to obtain a Bachelor of Science in Business. The goals of the articulation process are to: (a) provide students with a seamless transition between Helena College and MSU; (b) allow students to complete many of the first and second year requirements of the MSU Jake Jabs College of Business & Entrepreneurship program on the Helena campus; and (c) provide both institutions with mechanisms to ease the transfer process for students who intend to pursue a Bachelor of Science in Business degree from MSU. Upon completion of the requirements listed herein students will be well prepared for transfer to MSU to study Business. Several lower-division courses and establishment of MSU GPA of 2.50 or greater will be required before students will be eligible to apply for admission into the JJCBE.

### **Articulation Requirements:**

1. Students must select and complete the prescribed course of study contained herein while at Helena College, including fulfillment of all degree requirements. The specific requirements are shown in Appendix A.
2. In order to ensure ongoing articulation of the programs at each institution, participants from Helena College Academic Affairs and from the MSU Jake Jabs College of Business & Entrepreneurship agree to meet or confer by phone annually on a mutually agreeable date not later than January 31<sup>st</sup> to review and refine the agreement and attendant advising plan (herein provided as Appendix A) as needed.
3. During the pursuit of the Associate of Science degree option, students under this agreement will be advised by Helena College faculty.
4. This agreement takes effect upon execution, and shall remain in effect until such time as the chief academic officer of either institution notifies the other in writing of intent to discontinue the agreement. Such notification will be provided by not later than September 1<sup>st</sup> in the academic year PRIOR to termination of the agreement.

*Note: This degree offers eligibility for application to the Jake Jabs College of Business & Entrepreneurship at Montana State University-Bozeman and does not guarantee formal admission to the JJCBE.*



**Associate of Science leading to Bachelor of Science in Business Articulation with Montana State University Jake  
Jabs College of Business & Entrepreneurship**

<b>General Education Core: (30 credits):</b>		
Natural Sciences with Lab	4 credits	
Natural Sciences with or without Lab	3+ credits	
Mathematics	3 credits	Students advised to take M 121
Written Communication	3 credits	
Oral Communication	3 credits	
Social & Psychological Sciences/History	3 credits	
Social & Psychological Sciences/History	3 credits	
Humanities and Fine Arts	3 credits	Students advised to take BGEN 220
Humanities and Fine Arts	3 credits	
Cultural Diversity	3 credits	
<b>A.S. Additional Requirements: (6 credits):</b>		
Natural Science with lab	4 credits	
Any Natural Science or Mathematics course	2+ credits	Students advised to take STAT 216
<b>Advising Option: (24 credits):</b>		
ACTG 201	3 credits	Common Course Numbering (CCN) for ACTG 201
ACTG 202	3 credits	CCN for ACTG 202 (in JJCB MGMT, MKTG, ACTG, but not for FIN)
BGEN 105	3 credits	Substitution for JJCB BGEN 204
BGEN 235	3 credits	Substitutes for JJCB BGEN 361
BMIS270	3 credits	Course Accepted as JJCBE General Elective
CSCI 172	3 credits	Substitutes JJCBE BMIS 211
ECNS 201	3 credits	Substitutes for JJCBE ECNS 204 Business
ECNS 202	3 credits	CNN for ECNS 202
<b>Total AS Degree (60 credits)</b>		

\*Completion of one course designated as Cultural Heritage of American Indian (CHAI).

*Note: This degree offers eligibility for application to the Jake Jabs College of Business & Entrepreneurship at Montana State University-Bozeman and does not guarantee formal admission to the JJCBE.*



# MSU-Billings – Health Administration

## Associate of Science to Bachelor of Science (B.S.H.A.) Via Articulation Agreement with MSU Billings

Please contact Robyn Kiesling for more information at [robyn.kiesling@HelenaCollege.edu](mailto:robyn.kiesling@HelenaCollege.edu), or 406-447-6930

This articulation agreement applies to the A.S. degrees with the Social and Psychological Sciences option, for students seeking admission to the fully online Bachelor of Science in Health Administration (B.S.H.A.) program at Montana State University Billings.

A copy of the articulation agreement is available upon request. [Sandra.sacry@helenacollege.edu](mailto:Sandra.sacry@helenacollege.edu)

*Note: If the student has successfully completed the A.S. degree, with all courses as outlined in this document and having earned a C- or higher in each course, they will be guaranteed admission to MSUB, unless there are any disqualifying issues related to general, MSUB Admissions' policies. Students must complete this course online via MSU-Billings. Please plan accordingly and consult with a Financial Aid counselor if needed to coordinate aid during the term this course is completed.*

### Health Administration B.S.H.A. Required Courses

<b>General Education Core</b>		
<b>Natural Science &amp; Mathematics</b>		
<b>Choose ONE of the following</b>		
BIOB101	College Algebra or	3
BIOB104	Mathematics for the Liberal Arts	3
<b>Choose ONE of the following</b>		
M121	College Algebra or	3
M145	Mathematics for the Liberal Arts	3
<b>Choose ONE of the following</b>		
M121	College Algebra or	3
M145	Mathematics for the Liberal Arts	3
STAT216	Statistics	3
<b>Written &amp; Oral Communication</b>		
WRIT 101	College Writing I	3
WRIT 201	College Writing II	3
COMX111	Introduction to Public Speaking	3
<b>Social &amp; Psychological Sciences, History</b>		
PSYX110		3
ECNS202	Principles of Macroeconomics	3
<b>Humanities &amp; Fine Arts</b>		
HSTA101	American History I or	3
HSTA102	American History II	3
ARTH160	Global Visual Culture	3
<b>Program of Study</b>		
ACTG 101	Accounting Procedures	3
ACTG 102	Accounting Procedures II	3
ACTG 201	Prin of Financial Accounting	3
SOCI 101	Intro to Sociology	3
PSYX 260	Social Psychology	3
AHMS 144	Medical Terminology	4
HADM 210	Intro to Health Administration	3

\*Completion of one course designated as Cultural Heritage of American Indian (CHAI).





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## MSU Northern – Criminal Justice

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### **Associate of Arts/Associate of Science to Bachelor of Science Via Articulation Agreement with MSU Northern**

Please contact Robyn Kiesling for more information at [robyn.kiesling@HelenaCollege.edu](mailto:robyn.kiesling@HelenaCollege.edu), or 406-447-6930

This articulation agreement applies to the A.A. or A.S. degrees with the Social and Psychological Sciences option, for students seeking admission to the fully online Bachelor of Science in Criminal Justice (CJ) program at Montana State University Northern.

*Note: If the student has successfully completed the A.S. or A.A. degree, with all courses as outlined in this document and having earned a C- or higher in each course, they will be guaranteed admission to MSUN, unless there are any disqualifying issues related to general, MSUN Admissions' policies.*

**Please see your advisor for information regarding this degree.**

*Note: Students must complete an academic minor at MSU-Northern. Coursework taken at Helena College may count towards the minor; please consult with your advisor.*





## University Center Partnerships

UM Western – Early Childhood Education

University of Montana – Elementary Education, K-8

University of Montana – Master of Business Administration Program

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## University Center Partnerships

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All courses are offered through the partnering university and may be available to take at Helena College.

**UM Western – Early Childhood Education**  
**Associate of Applied Science**  
**Via Agreement with University of Montana Western**

Please contact School of Outreach, UM Western for more information at [outreach@umwestern.edu](mailto:outreach@umwestern.edu), or 866-799-9140

The Associate of Applied Science degree in 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 for learning by doing. Students also have many opportunities to interact with peers and professionals in the field.

This degree is conferred by UM-Western, but all courses can be taken at Helena College. Courses designated as UM-Western are subject to their policies as outlined in their catalog. General education courses are delivered through Helena College and are subject to the policies found in this catalog. Early childhood courses rotate on a two-year schedule, so it is imperative for interested students to contact an advisor as soon as possible. For more information, students should contact the School of Outreach at UM-Western at 866-799-9140 or the Welcome Center at Helena College at 406-447-6900.

**THE UNIVERSITY**  
*of*  
**MONTANA WESTERN**

## **University of Montana – Elementary Education, K-8**

### **Associate of Science to Bachelor of Arts**

#### **Via Articulation Agreement with Phyllis J. Washington College of Education and Human Sciences University of Montana**

Please contact Robyn Kiesling for more information at [robyn.kiesling@helenacollege.edu](mailto:robyn.kiesling@helenacollege.edu), or 406-447-6930

The Associate of Science (A.S.) advising option in Elementary Education at Helena College is designed specifically for articulation to the University of Montana's Phyllis J. Washington College of Education and Human Sciences for a Bachelor of Arts (B.A.) in K-8 Elementary Education. Upon completion of the A.S. degree, students are eligible to apply for admissions into UM's Teacher Education Program, but not guaranteed admission. Students must maintain a cumulative GPA of 2.75 in all courses and state licensure core content courses, and earn a grade of "C-" or better in all courses. Students accepted into UM's Teacher Education Program will enter with junior standing and complete coursework through UM to obtain a B.A. in K-8 Elementary Education.

UM's Level 1, 2, and 3 courses during the junior and senior years will be delivered remotely via synchronous web streaming to a classroom at Helena College, thus allowing students to participate in real-time lectures and classroom discussions without requiring their physical presence on the UM campus in Missoula.



## **University of Montana – MBA Program**

### **Master of Business Administration**

**Delivered by UM School of Business via public/private telecommunications network**

Please contact MBA School of Business Administration for more information at [mba@business.umt.edu](mailto:mba@business.umt.edu), or 406-243-2064

Distance Learning in the MBA Program at the University of Montana employs the latest technology to deliver courses primarily as two-way, digital video-conferences linking the UM School of Business Administration to classrooms at Helena College. Most of the professional program courses are delivered through compressed digital video over a public/private telecommunications network. Classes are regularly scheduled Monday-Thursday from 6:00 PM to 9:00 PM. Students can interact during class with the instructor and with students attending night classes in other communities in a user-friendly, live video environment. The curriculum is the exact same as the on-campus MBA option; please visit our other links to find out more about the MBA program as a whole.



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## Course Descriptions



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# Course Descriptions

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## Transferability Initiative

The Montana University System has been undergoing a statewide curriculum review to improve the transfer processes between its campuses. Helena College has been fully engaged in that review. As a result, many of our course prefixes, numbers, and even titles have had to change in order to more clearly connect to similar courses at other campuses. The course content is typically not any different, and any course that you took under its old name and number will be considered equivalent to the new name and number. If it is difficult to find information on a course, please contact the Helena College Academic Affairs Office at 406-447-6929 or search the Montana University System website for the new course information (<https://mus.edu/>) Updated 6/1/2020

### **ACTG101 ACCOUNTING PROCEDURES I**

*Credits: 3*

**Pre-requisite(s): None**

This course is an introduction to the basic accounting cycle, accounting transaction analysis, preparation of journal entries, trial balance, work sheet, and financial statements. Accounting for the sole proprietorships is emphasized including special journal accounting procedures.

### **ACTG102 ACCOUNTING PROCEDURES II**

*Credits: 3*

**Pre-requisite(s): A "C-" or higher in ACTG101 or consent of instructor**

A continuation of accounting transactions, financial statements, and analysis of accounts receivable, notes payable, notes receivable, merchandise inventory, property, plant, equipment, and long-term bonds. Accounting for partnerships and corporations is introduced.

### **ACTG180 PAYROLL ACCOUNTING**

*Credits: 3*

**Pre-requisite(s): A "C-" or higher in ACTG101**

This course is an introduction to payroll accounting which emphasizes the process of accounting for payroll by employers and the rights of employees. Topics covered include the historical perspective of payroll accounting, the payroll accounting process from the legal issues surrounding hiring and maintaining records for employees, calculating gross pay, net pay, and payroll taxes, calculating employees' deductions and benefits, recording payroll transactions, procedures for making payroll tax deposits and completing employment tax reports.

### **ACTG201 PRINCIPLES OF FINANCIAL ACCOUNTING**

*Credits: 3*

**Pre-requisite(s): A "C-" or higher in ACTG101 and M115 or M121, or M108T or STAT216, or consent of instructor.**

**ACTG 102 is recommended as a prerequisite for accounting students.**

This course emphasizes the understanding of fundamental accounting principles and procedures and will develop the student's accounting problem-solving abilities and critical thinking. 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 valuation methods, recording of property, plant, and equipment transactions, and long-term financing. Sources of equity capital for corporations and financial statements are analyzed.

### **ACTG202 PRINCIPLES OF MANAGERIAL ACCOUNTING**

*Credits: 3*

**Pre-requisite(s): A "C-" or higher ACTG201 or consent of instructor**

This 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.

### **ACTG205 COMPUTERIZED ACCOUNTING**

*Credits: 3*

**Pre-requisite(s): A "C-" or higher in ACTG101**

This course is an introduction to accounting on microcomputers, which provides a realistic approach to computerized, integrated accounting principles. This course emphasizes set up and maintenance of accounts and transactions used in the general ledger, sales and accounts receivable, purchasing and accounts payable, cash receipts, cash disbursements, job costing, financial statement analysis, payroll setup and processing, budgets and business analysis. Access to an off-campus pc (not mac) is required.

### **ACTG211 INCOME TAX FUNDAMENTALS**

*Credits: 3*

**Pre-requisite(s): None**

This course is a fundamental overview of tax schedules and forms as required by the Federal and State Internal Revenue Service.

### **ACTG215 FOUNDATIONS OF GOVERNMENTAL AND NOT FOR PROFIT ACCOUNTING**

*Credits: 3*

**Pre-requisite(s): A "C-" or higher in ACTG101 or consent of instructor**

Accounting for governmental and nonprofit organizations is explored. Topics covered include objectives and principles of accounting for governmental entities, differences between business and government accounting, modified and accrual accounting, transactions for the general fund, special revenue funds, capital projects funds, debt service funds, permanent funds, proprietary funds (enterprise and internal service), and fiduciary funds. The impact of FASB and GASB on reporting for colleges and universities, governmental entities and other nonprofit organizations is reviewed.

### **ACTG292 INDEPENDENT STUDY**

*Credits: 1*

**Pre-requisite(s): Consent of Helena College faculty member in the selected program area and approval of Division Director**

This course is designed to meet specific learning needs of students. Typically, such independent study projects focus on learning opportunities not otherwise offered in our college curriculum. The student must seek prior approval of an instructor willing to serve as faculty sponsor. The student then initiates a proposal describing, among other things, the number of hours to be spent on the study project, specific learning outcomes, and how evaluation is to be accomplished. The approved proposal will have signatures of the student, faculty sponsor, Division Director, and Executive Director of Enrollment office.

### **ACTG298 INTERNSHIP**

*Credits: 1*

**Pre-requisite(s): Consent of Helena College faculty member in the selected program area and approval of the Division Director**

This course is designed for the student who takes the initiative to perform professional skills outside of and in addition to the normal school curriculum. If done properly, it can be a highly rewarding experience and aid the student's transition from school to work. The student initiates a proposal describing, among other things, the number of hours to be spent in the internship, specific learning outcomes, and how evaluation is to be accomplished. The approved proposal will have signatures of the Student, Faculty Sponsor, Division Director, and Executive Director of Enrollment office.

### **AHMS105 HEALTHCARE DELIVERY SYSTEMS**

*Credits: 3*

**Pre-requisite(s): None**

This course will allow students to develop an understanding of the history and development of today's healthcare system in the United States. Students will develop an understanding of various types of facilities, the "continuum of care" concept that is the basis for modern health care, and examine the quality management process. The course also provides students with a working knowledge of reimbursement mechanisms and managed care concepts that affect health care delivery.

### **AHMS108 HEALTH DATA CONTENT & STRUCTURE**

*Credits: 3*

**Pre-requisite(s): None**

This course provides an in-depth study of origin, use, content and structure of health records; storage and retrieval systems; numbering and filing systems; documentation requirements; use and structure of health care data sets; and how these components relate to primary and secondary record systems. Students will also develop an understanding of the compilation and computing of healthcare related statistics, use of research and statistical methods for developing healthcare data into information for various requesters.

### **AHMS144 MEDICAL TERMINOLOGY**

*Credits: 3*

**Pre-requisite(s): None**

The course introduces students to complex medical terminology and facilitates students in recognizing that the meaning of complex medical terms can be determined by analyzing simpler components using prefixes, suffixes, and word roots. Correct pronunciation, definition, and spelling of these terms are derived through extensive usage of the textbook and computer software exercises. This course will connect the medical terminology to the basic structure and functioning of the systems of the human body including aspects of normal physiology and function, deviations from normal, diseases, and maintenance of health.

### **AHMS156 MEDICAL BILLING FUNDAMENTALS**

*Credits: 3*

**Pre-requisite(s): None**

AHMS 156 familiarizes students with the fundamentals of medical billing. Students will learn about commercial insurance carriers, Medicare, Medicaid, managed care, military insurance carriers, and worker's compensation. Students will discuss insurance regulations and fee schedules, learn how to read an EOB and complete

payment calculations. Students will also discuss HIPAA and its impact on healthcare.

### **AHMS160 BEGINNING PROCEDURAL CODING**

*Credits: 3*

**Pre-requisite(s): A "C-" or higher in AHMS144**

This course covers the basic levels of theory and application of the principles and guidelines for coding and sequencing medical procedures and services. Examples of patient records and coding exercises using the CPT and HCPCS coding manuals and simulation software will provide practice in coding procedures and services. This course involves the application of CPT and HCPCS codes, knowledge of medical terminology and procedures, and the use of simulated patient case scenarios.

### **AHMS164 BEGINNING DIAGNOSIS CODING**

*Credits: 3*

**Pre-requisite(s): A "C-" or higher in AHMS144**

This course covers the basic levels of theory and application of ICD-10-CM principles and guidelines for coding and sequencing diagnoses and procedures. Examples of patient records and coding exercises using the ICD-10 coding manual and simulation software will provide practice in coding and sequencing diagnoses. This course involves the application of ICD-10 diagnosis codes, knowledge of medical terminology and procedures, and the use of simulated patient case scenarios.

### **AHMS210 BASIC MEDICAL CODING**

*Credits: 3*

**Pre-requisite(s): A "C-" or higher in BIOH104**

This course will cover the introduction and basic coding information for CPT, HCPCS, and ICD-10 coding sets. The focus of this class is learning guidelines and assigning codes to a wide range of abbreviated coding scenarios covering different body systems and medical specialties.

### **AHMS220 MEDICAL OFFICE PROCEDURES**

*Credits: 3*

**Pre-requisite(s): A "C-" or higher in AHMS105, AHMS108 or AHMS156, or approval of instructor**

This course offers an introduction to the necessary skills and qualities required to develop key administrative competencies in professional responsibilities, interpersonal and written communications, records management, financial administration, and managing the medical office. This course will provide information and instruction regarding the latest accreditation and certification standards; latest insights on skill competency requirements, electronic technology, insurance regulations, including health care reform and coding as well as legal compliance.

### **AHMS252 COMPUTERIZED MEDICAL BILLING**

*Credits: 3*

**Pre-requisite(s): A "C-" or higher in AHMS144**

AHMS 252 familiarizes the student with the capabilities of medical practice software programs. Students learn and apply procedures such as patient scheduling, statement billing, payment reconciliation, insurance claim processing, procedure posting, HIPAA, medical records management, insurance company procedures, and insurance company regulations.

### **AMGT150 CUSTOMER SERVICE STRATEGIES**

*Credits: 3*

**Pre-requisite(s): None**

Customer service is an integral part of doing business. Developing excellent customer service can help a business earn customers and accomplish its goals. In this course, students will define and evaluate effective customer service while focusing on determining and meeting the needs of internal and external customers.

### **AMGT210 OFFICE SUCCESS STRATEGIES**

*Credits: 3*

**Pre-requisite(s): None**

This course is an introduction to the many aspects of a business environment. Topics covered include written and verbal communication, teamwork, office relationships, professionalism, time management, career planning, success on the job, issues in the workplace, etiquette, work ethic, professional appearance, critical thinking, problem solving, and office procedures.

### **AMGT292 INDEPENDENT STUDY**

*Credits: 1*

**Pre-requisite(s): None**

This course is designed to meet specific learning needs of students. Typically, such independent study projects focus on learning opportunities not otherwise offered in our college curriculum. The student must seek prior approval of an instructor willing to serve as faculty sponsor. The student then initiates a proposal describing, among other things, the number of hours to be spent on the study project, specific learning outcomes, and how evaluation is to be accomplished. The approved proposal will have signatures of the student, Faculty Sponsor, Department Chair, and Division Director, and Executive Director of Enrollment office.

### **AMGT298 INTERNSHIP**

*Credits: 1*

**Pre-requisite(s): Consent of Helena College instructor and approval of the Division Director**

This course is designed for the student who takes the initiative to perform work outside of and in addition to the normal school curriculum. If done properly, it can be a highly rewarding experience and aid the student's transition from school to work.

### **AMGT299 CAPSTONE: INTEGRATED OFFICE**

*Credits: 3*

**Pre-requisite(s): A "C-" or higher in CAPP153, CAPP154, CAPP156, and CAPP158**

Integrated Office Capstone utilizes the knowledge gained in the areas of computer skills, communication and writing techniques, business knowledge, customer service skills, project management, and office procedures in the creation of a culminating project.

### **ANTY101 ANTHROPOLOGY AND THE HUMAN EXPERIENCE**

*Credits: 3*

**Pre-requisite(s): None**

This course is a survey of the various subfields of anthropology including archaeology, physical anthropology, cultural anthropology, and linguistics.

### **ARTH200 ART OF WORLD CIVILIZATION**

*Credits: 3*

**Pre-requisite(s): None**

The course is an introduction to art history that will explore developments in art and architecture from the Prehistoric through Medieval periods ('caves to cathedrals') from a global perspective. We will focus on examples of significant artistic and architectural monuments from a range of historical periods and cultures that represent the foundations of art and architecture. The objective is that students will "learn to look" at artistic expression and the visual sources of history and come to an understanding of works of art within their historical contexts. Developing your analytical, critical, reading, writing, and discussion skills is central to our methods of introducing you to the practice of art history. We hope that your study in this course will lead to an enriched appreciation of art and culture and provide a challenging academic experience.

### **ARTH201 ART OF WORLD CIVILIZATION 2**

*Credits: 3*

**Pre-requisite(s): None**

The course is an introduction to art history that will explore developments in art and architecture from the Renaissance

through Contemporary art from a global perspective. We will focus on examples of significant artistic and architectural monuments from a range of historical periods and cultures that represent the foundations of art and architecture of the period. The objective is that students will "learn to look" at artistic expression and the visual sources of history and come to an understanding of works of art within their historical contexts. Developing ones analytical, critical, reading, writing, and discussion skills is central to the methods of introducing oneself to the practice of art history.

### **ARTH293 STUDY ABROAD**

*Credits: 3*

**Pre-requisite(s): None**

The study abroad experience enables an in-depth study of subjects reviewed in the following curriculums: business, history, interior space planning & design, art, economics, anthropology, sociology, psychology, environmental science, world literature, government, and communication. Globalization has a tremendous impact on every profession. Corporations, small businesses, as well as individuals work with people with diverse heritages, cultures, histories, languages, customs, attitudes, and values. This situation is enhanced by the rapid advancements in the technologies used to support virtual teams. An intensive on-site study of a country's business practices, history, culture, art, architecture, geography, religion, government, communication, and economy within the context of the global marketplace is critical to enhance career opportunities, intercultural relationships, and professional responsibilities.

### **ARTZ101 ART FUNDAMENTALS**

*Credits: 3*

**Pre-requisite(s): None**

This course is designed to give a basic history of art from cave paintings to modern and contemporary approaches. This is a lecture based course where students will use lectures, presentations, field trips, films, and some small art projects to further their understanding of art history. Students will be required to complete writing assignments as well as tests and quizzes on the lectures given.

### **ARTZ102 FUNDAMENTALS OF ART FOR ELEMENTARY TEACHERS**

*Credits: 2*

**Pre-requisite(s): None**

This course provides a survey of concepts, theories, and experiences for teaching art. It will enable the future elementary teacher to develop educational art units and lesson plans for the classroom. This is accomplished by imparting theoretical knowledge and experiencing practical applications.

### **ARTZ105 VISUAL LANGUAGE - DRAWING**

*Credits: 3*

**Pre-requisite(s): None**

This course explores the principles of design, as well as application of those principles through a wide variety of hands-on projects.

### **ARTZ106 VISUAL LANGUAGE - 2-D FOUNDATIONS**

*Credits: 3*

**Pre-requisite(s): None**

This introductory drawing course covers basic principles of drawing and design in art. Major areas of study are space, form, volume, tone, texture, and line, using various drawing materials and techniques.

### **ARTZ108 VISUAL LANGUAGE 3-D FOUNDATIONS**

*Credits: 3*

**Pre-requisite(s): None**

An Introductory design course covering basic elements and principles of 3 dimensional art. Major areas of study are space, form, and volume using various materials and techniques in the creation of 3-D objects.

### **ARTZ211 DRAWING I**

*Credits: 3*

**Pre-requisite(s): A "C-" or higher in ARTZ105**

ARTZ 211 is a more advanced drawing course focusing on human anatomy. Participants will observe, study and apply drawing techniques with such mediums as charcoal, pen and ink, ink wash, conte crayon/compressed charcoal, and graphite while studying live models, anatomical casts and personal anatomy studies in and outside of the classroom. Through these observations students will expand their knowledge of the human form through a classical drawing approach and critique themselves and their peers both verbally and in writing for the projects assigned.

### **ARTZ221 PAINTING I**

*Credits: 3*

**Pre-requisite(s): Recommended A "C-" or higher in ARTZ105 or ARTZ106**

Practice and principles of painting in traditional media, including watercolor, acrylic, and oil painting. The course emphasis is on acquiring and refining technical skills, composition and application of color theory. Research in historical and contemporary strategies.

### **ARTZ291 SPECIAL TOPICS**

*Credits: 3*

**Pre-requisite(s): Recommended A "C-" or higher in ARTZ105, ARTZ106, ARTZ 108, ARTZ211, OR ARTZ 221**

This course will build upon students' understanding of elements, principles and fine art practices in a studio course setting, creating and critiquing one's own work. Mediums will vary with the artists/teacher and their area of expertise. Students will need to have completed a previous ARTZ course or prove competent understanding in the medium offered in order to take this course.

### **ARTZ298 INTERNSHIP**

*Credits: 3*

**Pre-requisite(s): None**

This course is designed for the student who takes the initiative to perform professional skills outside of and in addition to the normal school curriculum. If done properly, it can be a highly rewarding experience and aid the student's transition from school to work. The student initiates a proposal describing, among other things, the number of hours to be spent in the internship, specific learning outcomes, and how evaluation is to be accomplished. The approved proposal will have signatures of the Student, Faculty Sponsor, Division Director and Executive Director of Enrollment office.

### **AST103 AUTOMOTIVE MECHANICS CORE**

*Credits: 2*

**Pre-requisite(s): None**

**Co-requisite(s): M111T**

This course covers proper shop safety procedures, safety materials, basic hand tool operation and identification, pneumatic and hydraulic tool operation and identification, vehicle hoist operation and safety, material safety data sheets (MSDS), precision measurement tools and application, fasteners and different fastener grades.

### **AST108 MANUAL DRIVETRAINS**

*Credits: 5*

**Pre-requisite(s):** AST103, AST130, AST230

This course covers the theory of operation and service procedures related to dry friction clutches, manual transmissions/transaxles, front drive axles, rear drive axles, drivelines, transfer cases, and locking hubs. Students will disassemble, inspect and re-assemble selected power train components.

### **AST114 AUTOMOTIVE BRAKES**

*Credits: 5*

**Pre-requisite(s):** A "C-" or higher in AST 103, AST108, AST 130, and AST 230

This course focuses on the function, diagnosis, and service practices of current automotive braking systems. Students will learn about disc and drum brake hydraulic, mechanical, and electrical systems, to include ABS systems.

### **AST118 BRAKES AND CHASSIS**

*Credits: 7*

**Pre-requisite(s):** AST 103, AST 108, AST 130, AST 160

This course focuses on the function, diagnosis, and service practices of current automotive braking, steering and suspension systems. Students will learn about disc and drum brake hydraulic, mechanical, and electrical systems, to include ABS systems. Students will also study current steering and suspension systems, to include 4 wheel alignments, suspension system, and tire service.

### **AST130 INTRODUCTION TO AUTOMOTIVE ELECTRONICS**

*Credits: 6*

**Pre-requisite(s):** None

**Co-requisite(s):** M111T or M121 or higher

This course is designed to give Automotive Technology students the basic electrical/electronic foundation needed to build on in other advanced courses requiring electrical and electronic knowledge. The course progresses from electrical/electronic theory, circuits and circuit failure, meters, and components through to starting and charging systems. The lab component of this course is designed to provide the hands-on activities common to automotive electrical/electronic applications. Emphasis will be placed on developing a knowledge and skill base needed to diagnose and repair general automotive electrical system malfunctions.

### **AST160 AUTOMOTIVE ENGINE REPAIR**

*Credits: 6*

**Pre-requisite(s):** A "C-" or higher in AST103, AST130, AND AST230

This course covers the theory of operation, diagnosis and service procedures associated with automotive engine repair. Students will learn automotive engine theory and will disassemble, assemble, and run electronically-controlled, overhead cam training engines and their related components.

### **AST172 AUTOMOTIVE HEATING/AIR CONDITIONING**

*Credits: 5*

**Pre-requisite(s):** A "C-" or higher in AST103, AST130, AST160, & AST230

This course is designed to provide Automotive Technology students with the knowledge and skills required to understand, service, and repair mobile air conditioning systems as used in the automotive industry. The course content includes heat and refrigeration principles, component function and interrelation concerns and EPA Requirements. The lab component is designed to provide the hands-on activities common to automotive, mobile air conditioning applications.

### **AST130 INTRODUCTION TO AUTOMOTIVE ELECTRONICS**

*Credits: 6*

**Pre-requisite(s):** None

**Co-requisite(s):** M111T or M121 or higher

This course is designed to give Automotive Technology students the basic electrical/electronic foundation needed to build on in other advanced courses requiring electrical and electronic knowledge. The course progresses from electrical/electronic theory, circuits and circuit failure, meters, and components through to starting and charging systems. The lab component of this course is designed to provide the hands-on activities common to automotive electrical/electronic applications. Emphasis will be placed on developing a knowledge and skill base needed to diagnose and repair general automotive electrical system malfunctions.

### **AST160 AUTOMOTIVE ENGINE REPAIR**

*Credits: 6*

**Pre-requisite(s): A "C-" or higher in AST103, AST130, AND AST230**

This course covers the theory of operation, diagnosis and service procedures associated with automotive engine repair. Students will learn automotive engine theory and will disassemble, assemble, and run electronically-controlled, overhead cam training engines and their related components.

### **AST172 AUTOMOTIVE HEATING/AIR CONDITIONING**

*Credits: 5*

**Pre-requisite(s): A "C-" or higher in AST103, AST130, AST160, & AST230**

This course is designed to provide Automotive Technology students with the knowledge and skills required to understand, service, and repair mobile air conditioning systems as used in the automotive industry. The course content includes heat and refrigeration principles, component function and interrelation concerns and EPA Requirements. The lab component is designed to provide the hands-on activities common to automotive, mobile air conditioning applications.

### **AST220 AUTOMOTIVE STEERING AND SUSPENSION**

*Credits: 5*

**Pre-requisite(s): A "C-" or higher in AST 103, AST 108, AST 130, AST 160, & AST230**

This course focuses on the function, diagnosis, and service practices of current automotive steering and suspension systems. Students will learn and study current steering and suspension systems, to include 4 wheel alignments, suspension systems, and tire service.

### **AST230 ELECTRICAL/ELECTRONIC SYSTEMS II**

*Credits: 6*

**Pre-requisite(s): A "C-" or higher in AST103 and AST130**

This course covers theory of operation, diagnosis, and service procedures related to selected electrical and electronically controlled systems. Systems/subjects covered include: vehicle communication networks, supplemental inflatable restraint systems, anti-theft systems, cruise control, remote keyless entry, and power accessories.

### **AST262 ENGINE PERFORMANCE I**

*Credits: 6*

**Pre-requisite(s): A "C-" or higher in AST103, AST130, AST160, and AST230**

This course covers theory of operation, diagnosis, and service procedures as they relate to engine performance. Subjects studied will include the effects of engine design on performance, federal emissions legislation, fuel composition and characteristics, electronic fuel injection, and computerized engine control. Students will learn to use industry-accepted test procedures and test equipment to determine the cause of degraded engine performance, drivability complaints, and/or excessive exhaust emissions.

### **AST264 ENGINE PERFORMANCE II**

*Credits: 6*

**Pre-requisite(s): A "C-" or higher in AST103, AST130, AST160, AST230, and AST262**

This course covers principles of operation, safety practices, service, and diagnostic procedures related to computerized engine management systems. Ignition and emission control system diagnosis and repair will be explored with special emphasis given to the development of proper diagnostic skills and the use of state of the art electronic test equipment.

### **AST270 AUTOMATIC TRANSMISSIONS/TRANSAXLES**

*Credits: 6*

**Pre-requisite(s): A "C-" or higher in AST103, AST108, AST130, AST230, and AST262**

This course covers the theory of operation, diagnosis, and service procedures related to hydraulically controlled and computerized automatic transmissions and transaxles. Students will disassemble, rebuild, and reassemble selected transmissions/transaxles.

### **AST274 INTRODUCTION TO HYBRID VEHICLE TECHNOLOGY**

*Credits: 3*

**Pre-requisite(s): A "C-" or higher in AST103, AST130, AST160, AST230, AST262, & AST264**

The Introduction to Hybrid-Electric Vehicle Technology AST 274 course will provide students with instruction in theory and operation, service practices, and diagnostic procedures related to hybrid electric vehicles. Subjects covered will include high voltage safety, high voltage battery design and test procedures, electric machine/ motor operation, power inverters, DC to DC converters, hybrid vehicle braking systems, electric power steering, and hybrid vehicle heating and air conditioning.



### **AST276 LIGHT DUTY DIESEL**

*Credits: 3*

**Pre-requisite(s):** A "C-" or higher in AST103, AST130, AST160, AST262, and AST264; or current ASE Master Automotive Technician Certification; or AAS in Automotive Technology

This course covers theory of operation, diagnosis, and service procedures of the automotive diesel engine and related systems. Subjects studied will include the mechanics of a diesel engine, diesel fuels and compositions, fuel delivery and injection systems, exhaust emissions, and exhaust after treatment systems per federal emission standards. Students will learn to use industry accepted test procedures and test equipment to determine the cause and learn to correct common diesel engine failures.

### **AST280 APPLIED LAB EXPERIENCE AND LIGHT REPAIR**

*Credits: 5*

**Pre-requisite(s):** A "C-" or higher in AST103, AST108, AST118, AST160, AST172, and AST230, AST262  
**Co-requisite(s):** AST264 and AST270

This is a "capstone" experience course for Automotive Technology students in their second year, intended to apply their knowledge base acquired in previous courses to additional, repetitive lab experiences, thereby developing their critical thinking and physical service skills. It is important to note that this is not a "hobby shop" or "rebuild" course and will focus on "quick turn-around" light repair and problem solving. Emphasis will be placed on vehicle service practices, preventative maintenance, component diagnosis and replacement, electrical/electronic systems diagnosis and repair, heating and A/C service, and "under car" service and repair.

### **ASTR110 INTRODUCTION TO ASTRONOMY**

*Credits: 4*

**Pre-requisite(s):** None

This course provides an introduction to astronomy with a lab component for the non-science major. Topics include the tools of astronomy, the solar system, stars and stellar evolution, the Milky Way, extragalactic astronomy, cosmology, and life in the universe.

### **AVMT100 INTRODUCTION TO AVIATION**

*Credits: 3*

**Pre-requisite(s):** None

This course introduces students to many facets of aviation maintenance and where it is going into the future. The course will also cover mathematical concepts such as powers and roots, ratio and proportion, and practical applications of plane geometry and algebra, and basic physics, to include mechanical

advantage, conversion between forms of energy, vibrations, the gas laws, heat, and pressure.

### **AVMT105 BASIC ELECTRICITY**

*Credits: 3.5*

**Pre-requisite(s):** None

This course covers the elements of basic electricity, laying the foundation for electrical circuitry, and supporting the explanation of electrical power generation and distribution, which is necessary for understanding the way aircraft electrical systems function. This course will also describe current flow and to analyze circuit operation in both theory and practical applications.

### **AVMT110 AIRCRAFT DRAWINGS**

*Credits: 3*

**Pre-requisite(s):** None

This course introduces aircraft drawings, which enhances the ability to communicate ideas, to understand and explain an operation, and to record what has been done to an aircraft using symbols and different types of drawings such as views, and projections used in aircraft maintenance. The course will also introduce weight and balance, for safety and efficiency of flight, of maintaining the weight of an aircraft and its center of gravity within their specified limits. The course will cover the theory of aircraft weight and balance, weight and balance information, and the procedures for weighing an aircraft, and how to find the aircraft center of gravity and perform adverse-load center of gravity checks.

### **AVMT115 MATERIALS AND PROCESSES**

*Credits: 4*

**Pre-requisite(s):** None

This course provides students the opportunity to inspect aircraft components for wear, identify aircraft hardware and materials, learn the basic theory of heat-treatment processes, nondestructive inspection procedures, and perform dye-penetrant and magnetic particle inspections. The course will also cover fluid lines and fittings, which must be of the correct size and material. The student is introduced to the selection of materials for both rigid and flexible fluid lines and to the proper installation of various types of aircraft fittings on these lines. The student is also taught the proper installation and inspection of high-pressure fluid lines in an aircraft. This course also covers the importance of recognizing and properly treating an aircraft structure that shows evidence of corrosion. This introduces the student to the selection of cleaning materials, with emphasis on their relationship to the type of material being cleaned. It stresses the identification of the various types of corrosion, the evaluation of corrosion

damage, the proper way of removing the corrosion deposits, and treatment of the corroded areas.

### **AVMT120 GROUND OPERATION AND SERVICING**

*Credits: 1.5*

**Pre-requisite(s): None**

This course introduces servicing and ground operations of aircraft, and covers the choice and identification of fuels for both reciprocating and turbine engine powered aircraft and the necessary precautions to observe when fueling an aircraft. Since awareness of ground operations and hazards are emphasized in this section, the student is also introduced in-depth, "Safety in the Shop and on the Flight Line." This increment also covers the proper procedure for starting reciprocating and turbine engines and the procedures for proper engine run-up, aircraft movement, and tie-down.

### **AVMT125 MAINTENANCE PUBLICATIONS**

*Credits: 3*

**Pre-requisite(s): None**

This course introduces knowledge of basic aerodynamics; this deals with the motion of air and the forces acting on bodies moving relative to the air. In the study of aerodynamics, the student learns about why and how an airplane flies. Although aerodynamics is a complex subject, exploring the fundamental principles, which govern flight, is the main challenge in understanding what makes an airplane fly and begins with learning the four forces of flight, which are lift, weight, thrust and drag.

### **AVMT130 BASIC AERODYNAMICS**

*Credits: 3*

**Pre-requisite(s): None**

This course introduces knowledge of basic aerodynamics; this deals with the motion of air and the forces acting on bodies moving relative to the air. In the study of aerodynamics, the student learns about why and how an airplane flies. Although aerodynamics is a complex subject, exploring the fundamental principles, which govern flight, is the main challenge in understanding what makes an airplane fly and begins with learning the four forces of flight, which are lift, weight, thrust and drag.

### **AVMT135 ASSEMBLY AND RIGGING, AND AIRFRAME INSPECTION**

*Credits: 4*

**Pre-requisite(s): None**

This course introduces knowledge of the correct assembly and rigging of an aircraft which is vital to safe and efficient flight, this section explains the relationship between aircraft rigging and the aerodynamics of flight. The course

also introduces how to determine the legal airworthiness of an aircraft, its powerplant, and components. The student will learn the inspection aspects from a legal standpoint in which the emphasis is placed on the practical aspects and performance of required inspections.

### **AVMT140 SHEET METAL**

*Credits: 4*

**Pre-requisite(s): None**

This course introduces knowledge of sheet metal structures, which is one of the most important types of modern aircraft construction. This section gives students a solid lesson in the types and materials for metallic aircraft structures, a discussion that includes the stresses on aircraft structure, and the strength of various metal materials. The student is taught to install conventional rivets, special rivets and fasteners; hand form, layout, and bend sheet metal; and to inspect and repair sheet metal structures..

### **AVMT145 COMPOSITES AND PLASTICS**

*Credits: 4*

**Pre-requisite(s): None**

This course introduces knowledge of nonmetallic composite structures, which is the second most important type of modern aircraft construction. This section gives students a solid lesson in the types of composite materials and their manufacture details, a discussion that includes the foundation for the understanding of Nonmetallic Aircraft Structures and Composite Structure Inspection and Repair.

### **AVMT150 WOOD STRUCTURES**

*Credits: 2*

**Pre-requisite(s): None**

This course introduces aircraft wood structures; the student will learn and be able to identify defects and the different kinds of woods suitable for their application, describe the kinds of glues and gluing techniques, and to restore old aircraft that have wood wing spars, ribs and plywood structures.

### **AVMT155 AIRCRAFT COVERING AND FINISHES**

*Credits: 2*

**Pre-requisite(s): None**

This course introduces the student to the application and maintenance of fabric covered aircraft. They will learn about how a fabric covering is properly attached to aircraft structures. The student will become familiar with the different types of covering materials that are used to cover an aircraft plus the dope fillers, paints and rejuvenator finishes used on the fabric..

### **AVMT160 AIRCRAFT WELDING**

*Credits: 3*

**Pre-requisite(s): None**

This course introduces the knowledge of welding, which is important, because modern structures are so complex and highly stressed that welding is usually a specialized type of repair done under highly controlled conditions. This section concludes the discussion of Metallic Aircraft Structures with a detailed description of the types, tools, materials and methods of welding for aircraft construction, maintenance and repair.

### **AVMT165 HYDRAULIC AND PNEUMATIC POWER SYSTEMS**

*Credits: 3*

**Pre-requisite(s): None**

This course introduces hydraulic and pneumatic power systems that are used to operate many of the vital systems, such as landing gear retraction, brakes, and powered flight controls. The students will inspect, check, service, troubleshoot and repair these systems and will learn to work safely with these fluids and their pressurized containers.

### **AVMT170 AIRCRAFT LANDING GEAR SYSTEMS**

*Credits: 3*

**Pre-requisite(s): None**

This course introduces landing gear systems, which is subject to greater stresses than any other airframe system and therefore the student must completely understand these vital components. This section includes lectures and schematic diagrams of these systems, exploded views of the assemblies, and illustrations of the workings of brake control systems and the required maintenance. The different systems are covered in three areas; anti-skid brakes and their systems, electrical circuits and landing gear actuation, and warning systems for instruments that indicate and measure movement.

### **AVMT175 AIRCRAFT ELECTRICAL SYSTEMS**

*Credits: 1.75*

**Pre-requisite(s): None**

This course introduces electricity and airframe electrical systems. The course consists of a review of basic electricity and how electrical energy is produced and used in aircraft circuits. The student will learn both general diagram symbols and specific electrical systems along with acceptable methods of installation and the proper use of electrical testing equipment.

### **AVMT180 AIRCRAFT FUEL SYSTEMS/FIRE PROTECTION SYSTEMS/ICE AND RAIN CONTROL SYSTEMS**

*Credits: 3*

**Pre-requisite(s): None**

This course is designed to introduce the student to the fact that modern aircraft carry a large volume of highly flammable fuel in a complex system of tanks, valves, and pumps. The student will learn these systems in order to service them efficiently and safely. This section describes the various aircraft fuels, and explains fuel system requirements. This course also introduces fire protection systems; both fire detections systems and fire extinguishing systems as used in aircraft. The student will learn about the nature of aircraft fires and the appropriate methods and agents used for detecting and extinguishing these fires. This section explains these fire protection systems. This course also covers ice and rain control systems, which provides the student with information on systems that prevent the formation of ice on an aircraft structure and systems to remove ice after it forms.

### **AVMT185 CABIN ATMOSPHERE CONTROL SYSTEMS**

*Credits: 2.5*

**Pre-requisite(s): None**

This section covers maintaining an aircraft cabin environment with the proper pressure, temperature, humidity, and air movement, which is more than a matter of comfort; it also involves a safety factor. This section backs up its discussion of these systems by starting with an explanation of "Human Needs in Flight" and how the atmosphere, the chemistry of oxygen, and the physics of heat, temperature, and pressure relate to this topic.

### **AVMT187 AIRCRAFT INSTRUMENT SYSTEMS/COMMUNICATION AND NAVIGATION SYSTEMS**

*Credits: 2.25*

**Pre-requisite(s): None**

This course introduces instrument systems that are needed to provide the flight crew with data relating to the operating of the various flight and powerplant systems. This section describes the instruments and the basic operating principles of the systems that run them. The student will learn the installation and maintenance of these systems. Aircraft depend upon electronic navigation and communication equipment. The student will learn their responsibility for determining the condition of the installed equipment and its interface with the aircraft itself. The student will also receive a detailed discussion of communication and navigation systems, as well as basic radio theory, to provide the understanding of how these systems should work.

## **AVMT225 RECIPROCATING ENGINES AND SYSTEMS I**

*Credits: 5.5*

### **Pre-requisite(s): None**

This course will introduce the student to the development of aircraft powerplants from the Wright Brothers first engine, to the modern piston, turbine and turboprop engines that are used on aircraft and helicopters throughout the world today. This course will also introduce the student to aircraft reciprocating engine maintenance including operation and overhaul.

## **AVMT230 RECIPROCATING ENGINES AND SYSTEMS II**

*Credits: 5.5*

### **Pre-requisite(s): None**

This course introduces the student to aircraft reciprocating engine maintenance including troubleshooting, inspections and repairs to both engines and the systems used to operate the engine. It will also introduce the student to correct servicing and operation of the basic functions of the lubrication system and components, as well as the specific lubricants essential for safe reciprocating engine operation. They will gain an understanding of the ignition and starting requirements for reciprocating engine systems, and discusses the many different aspects of reciprocating engine ignition and starting systems. They will be introduced to reciprocating engines carburetion and fuel injection systems and the methods and equipment used to deliver aviation fuel to the engine fuel metering systems. The course also describes the different components and subsystems used to supply fuel to the engine and demonstrates the various methods used to supply an adequate amount of clean air to the engine. The students learn how air induction systems direct air to the engine and how to prevent induction system icing. They will also learn the various methods used to turbocharge or supercharge a piston engine.

The importance of the cooling systems for reciprocating engines. They will learn the different methods used to control the heating and cooling of aircraft piston engines and the proper procedures employed to maintain cooling systems. They will also be educated in the dangers of exhaust gases and to the systems and methods used to properly direct damaging exhaust gases away from the aircraft.

## **AVMT235 TURBINE ENGINES AND SYSTEMS**

*Credits: 6*

### **Pre-requisite(s): None**

This course introduces the aircraft powerplants that are of the turbine type. This section introduces the student to

different types of turbine engines, which include the detailed material that covers the step-by-step, hands-on procedures for turbine engine inspection, troubleshooting, and repair. This course includes the operation of fuel metering components, induction and exhaust systems, method of heat dissipation, and starter systems.

## **AVMT240 ENGINE INSTRUMENT SYSTEMS**

*Credits: 3*

### **Pre-requisite(s): None**

This course covers all required powerplant instrumentation, and also discusses the various types of electronic, digital and computerized instrumentation of today's aircraft.

## **AVMT245 ENGINE ELECTRICAL SYSTEMS**

*Credits: 3.75*

### **Pre-requisite(s): None**

In this section the methods of generating and controlling electrical energy are discussed. It includes a refresher of electrical principles as they apply to powerplant operation, and each control system in detail. There is also a lecture on aircraft electrical system installation, to prepare the student for the practical application of electrical system service and maintenance. The student will also learn about the APU (auxiliary power unit) system that is used to provide electricity and compressed air when the aircraft is on the ground and the main engines are not operating.

## **AVMT250 ENGINE FIRE PROTECTION SYSTEMS**

*Credits: 2.5*

### **Pre-requisite(s): None**

This course teaches the student how modern aircraft powerplants are protected from fire with effective fire-detection systems and fire-extinguishing systems. These are described in detail so the student understands the practical application necessary in the servicing, inspection, troubleshooting and repair of these systems.

## **AVMT255 PROPELLERS AND UNDUCTED FANS**

*Credits: 4*

### **Pre-requisite(s): None**

This course introduces the student to propeller theory as a foundation for the understanding of propeller maintenance, repair and inspection. This course also introduces a new development in aircraft propulsion that is known as an ultra-high bypass (UHB) turbofan, or unducted fan (UDF) engine.

## **BFIN265 INTRODUCTION TO BUSINESS FINANCE**

*Credits: 3*

**Pre-requisite(s): A "C-" or higher in ACTG101 and BGEN105**

This course is designed to assist students in making effective financial business decisions. Topics include time value of money, cash flow, financial ratio analysis, long-term financing/equity decision, working capital management, personal finance, and the influence of the economic environment of a business' financial considerations.

## **BGEN105 INTRODUCTION TO BUSINESS**

*Credits: 3*

**Pre-requisite(s): Recommended: WRIT101 or WRIT101 taken concurrently**

This course introduces the nature of business and the trends that change the way business is conducted. Topics covered in this course include the business environment, starting a business, management, ethics, social responsibility, human resources, marketing and finance.

## **BGEN220 BUSINESS ETHICS AND SOCIAL RESPONSIBILITY**

*Credits: 3*

**Pre-requisite(s): A "C-" or higher in BGEN105 or consent of instructor**

This course focuses on moral judgments, responsibilities to society, and their impact on decision making, with particular emphasis on business ethics and values. Organizations and their relationship to the external environment, the law, and various stakeholders are addressed.

## **BGEN235 BUSINESS LAW**

*Credits: 3*

**Pre-requisite(s): A "C-" or higher in BGEN105**

This course is an overview of business law including the judicial system and procedures. Emphasis will be on ethics and law, tort law, contract law, sales and lease laws, negotiable instruments, bankruptcy laws, and legal ramifications for organizational types.

## **BGEN292 INDEPENDENT STUDY**

*Credits: 1*

**Pre-requisite(s): Consent of Helena College faculty member in the selected program area and approval of the Division Director**

This course is designed to meet specific learning needs of students. Typically, such independent study projects focus on learning opportunities not otherwise offered in our college curriculum. The student must seek prior approval

of an instructor willing to serve as faculty sponsor. The student then initiates a proposal describing, among other things, the number of hours to be spent on the study project, specific learning outcomes, and how evaluation is to be accomplished. The approved proposal will have signatures of the Student, Faculty Sponsor, Division Director, and Executive Director of Enrollment office.

## **BGEN298 INTERNSHIP**

*Credits: 1*

**Pre-requisite(s): Consent of Helena College faculty member in the selected program area and approval of the Division Director**

This course is designed for the student who takes the initiative to perform professional skills outside of and in addition to the normal school curriculum. If done properly, it can be a highly rewarding experience and aid the student's transition from school to work. The student initiates a proposal describing, among other things, the number of hours to be spent in the internship, specific learning outcomes, and how evaluation is to be accomplished. The approved proposal will have signatures of the Student, Faculty Sponsor, Division Director, and Executive Director of Enrollment office.

## **BIOB101 DISCOVER BIOLOGY**

*Credits: 4*

**Pre-requisite(s): None**

**Co-requisite(s): BIOB102**

This non-majors Biology lecture and lab course introduces the student to the fundamentals of biological organization, the scientific method, cellular biology, molecular biology, genetics, ecology and origins. Relationships between form and function, acquisition and the use of energy, and continuity among generations will be addressed.

## **BIOB160 PRINCIPLES OF LIVING SYSTEMS**

*Credits: 4*

**Pre-requisite(s): None**

The first course in the biology sequence is an introduction to the basic concepts and principles of general biology with an emphasis on lab experiences, critical thinking, problem solving, and the scientific method. Areas of study include organic chemistry and biochemistry, cellular biology, cell growth, genetics and genetic engineering, reproduction, cell metabolism, ecology, evolution theory, and classification systems in biology.

### **BIOB170 PRINCIPLES OF BIOLOGICAL DIVERSITY**

*Credits: 4*

**Pre-requisite(s): None**

The second course in the biology sequence emphasizes study of the principles of biology within specific classifications such as kingdoms and species. Areas of study include viruses, bacteria, protists, fungi, plant, invertebrates, vertebrates, and human biology.

### **BIOB260 CELLULAR AND MOLECULAR BIOLOGY**

*Credits: 4*

**Pre-requisite(s): CHMY 121/122; and BIOB 101 or higher**

An introduction to the biology of the cell, including the nature of organization of the cell, cell growth, basic bioenergetics and enzyme function, cell environment, membrane structure and function, the chemical and physical mechanisms of metabolism in plants and animals, and the work performed by cells. Laboratory is included.

### **BIOB275 GENERAL GENETICS**

*Credits: 4*

**Pre-requisite(s): A "C-" or higher in BIOB160 or BIOB160**

This course will emphasize biological principles, scientific concepts, and experimental design. Expected outcomes are that the student will thoroughly understand the mechanisms of inheritance, develop firm grasp of the fundamental principles of gene structure and gene expression and gain experience in reading primary literature that uses genetics to address fundamental biological questions. Genetics is a problem-based science.

### **BIOB298 BIOLOGY INTERNSHIP**

*Credits: 1*

**Pre-requisite(s): None**

This course is designed for the student who takes the initiative to perform work outside of and in addition to the normal school curriculum. If done properly, it can be a highly rewarding experience and aid the student's transition from school to work. Internship plans need approval from Department Administration and HR. Contact your program advisor for paperwork and procedural information.

### **BIOH104 BASIC HUMAN BIOLOGY**

*Credits: 4*

**Pre-requisite(s): None**

This one-semester course covers the basic anatomy and physiology of the human body. Lecture will concentrate on the physiology (function) of several body systems including the nervous, cardiovascular, respiratory, and urinary systems and how they contribute to homeostasis of

the body. Lab will mainly concentrate on the anatomy (form) of bones, muscles, brain and spinal cord, and the heart.

### **BIOH201 ANATOMY AND PHYSIOLOGY I WITH LAB**

*Credits: 4*

**Pre-requisite(s): None**

This is the first course of a two-semester course series. In this course the student will build on the general principles of cell biology and basic chemistry. Structure and function of the integumentary, skeletal, muscular, and nervous systems will be studied, with emphasis on homeostasis, control, and integration of the human body. Lecture will concentrate on physiology (function) while the lab experience will concentrate on anatomy (form), including histology (cellular level).

### **BIOH211 ANATOMY AND PHYSIOLOGY II WITH LAB**

*Credits: 4*

**Pre-requisite(s): A "C-" or higher BIOH201**

This is the second course of a two-semester course series. In this course the student will build on the general principles of cell biology and basic chemistry. Structure and function of the endocrine system, cardiovascular system, digestive system, renal system and reproductive system. Lecture will concentrate on physiology (function) while the lab experience will concentrate on anatomy (form), including histology (cellular level).

### **BIOM250 MICROBIOLOGY FOR HEALTH SCIENCES**

*Credits: 4*

**Pre-requisite(s): A "C-" or higher BIOB160 or BIOH201**

This course will survey both general and medical microbiology. It will emphasize medical microbiology and place it in perspective with the whole of human health. Bacterial, fungal, and viral agents of disease will be studied and methods for their identification and control.

### **BMGT210 SMALL BUSINESS ENTREPRENEURSHIP**

*Credits: 3*

**Pre-requisite(s): Consent of Instructor**

This course introduces the student to entrepreneurial mind set necessary to discover opportunities for markets and situations in which a small business can be developed successfully. Topics covered include the nature of small business, seeking entrepreneurial opportunities, developing new ventures, marketing and managing a small business, and the social and legal environment of businesses.

### **BMGT215 HUMAN RESOURCE MANAGEMENT**

*Credits: 3*

**Pre-requisite(s): A "C-" or higher in BGEN105**

This course introduces the student to an overview of the background of human resource management, acquisition of human resources, training and development of employees, compensation of human resources, and labor relations. Topics covered include human resource planning, recruitment, selection and training, equal opportunity and employment laws, job analysis and design, performance management systems, compensation and benefits, and employee/labor relations.

### **BMGT235 MANAGEMENT**

*Credits: 3*

**Pre-requisite(s): A "C-" or higher in BGEN105 and WRIT101**

Students learn efficient and effective use of resources in achieving organizational goals. Topics include the environment of management, the functions of planning, organizing, leading, and controlling, and decision-making for organizational leaders.

### **BMGT263 LEGAL ISSUES IN HUMAN RESOURCES**

*Credits: 3*

**Pre-requisite(s): A "C-" or higher in BGEN105**

This course introduces the student to an overview of legal issues in human resource and employment law. Topics covered include employment relationships, hiring, termination, employment discrimination, employment regulation (wage and hour, safety, workers' compensation), and employee evaluation.

### **BMIS270 MIS FOUNDATIONS FOR BUSINESS**

*Credits: 3*

**Pre-requisite(s): A "C-" or higher in CAPP156 or CSCI172 (CSCI172 preferred)**

The field of Management Information Systems (MIS) is an exciting academic discipline that is integral to all business activities. This course is designed to introduce students to MIS and examine how these powerful systems have fundamentally reshaped modern organizations, as well as our society. This course focuses on the key components of MIS- people, software, hardware, data, and telecommunications, highlighting how these components can be integrated and managed to create and sustain competitive advantages. This course utilizes MS Access.

### **BMIS285 FUNDAMENTALS OF MANAGEMENT INFORMATION SYSTEMS**

*Credits: 3*

**Pre-requisite(s): None**

The Fundamentals of Management Information Systems course is designed to introduce technology students to information systems. This course focuses on the key components of information systems – people, software, hardware, data, and telecommunications. Technology students will learn the terminology used in the information technology (IT) field as well as how information flows within a business. They will also gain an understanding of how local, regional, national, and global businesses utilize IT to gain competitive advantage.

### **BMKT225 MARKETING**

*Credits: 3*

**Pre-requisite(s): A "C-" or higher in BGEN105 and WRIT101**

This course introduces the student to making marketing decisions. Topics covered include the marketplace and consumers, marketing plans, market analysis, the marketing mix, and global marketing.

### **BMKT240 ADVERTISING**

*Credits: 3*

**Pre-requisite(s): A "C-" or higher in BGEN105**

This course is designed to acquaint students with the fundamentals and terminology of advertising. Topics covered are the role of advertising, demographic segmentation, advertising psychology, advertising strategies, media strengths and weaknesses, layout and design, and careers in advertising. Class participants will develop their own advertisements using a variety of media.

### **CAPP131 BASIC MS OFFICE**

*Credits: 3*

**Pre-requisite(s): None**

This course provides students with basic computer literacy concerning terminology, careers, and social issues related to computer, network, and information technology. Topics include issues with computer use, ethics, crime, and copyright issues. Students will explore a computer operating system, word processing and spreadsheet application software, and the internet to find solutions for real world problems. Through hands-on activities, participants will learn effective uses of a Windows-based computer as a tool to increase their productivity.

### **CAPP153 MS POWERPOINT**

*Credits: 3*

**Pre-requisite(s): None**

Using MS PowerPoint, students will apply effective design concepts and features to create readable, well-balanced presentations to use in a business or educational setting. A variety of appropriate presentation techniques will be discussed and applied.

### **CAPP154 MS WORD**

*Credits: 3*

**Pre-requisite(s): None**

Students will learn the basic principles of word processing. Emphasis is placed on creating, saving, editing, and formatting documents along with some of the special features of the word processing software. This course uses Microsoft Word.

### **CAPP156 MS EXCEL**

*Credits: 3*

**Pre-requisite(s): None**

Using MS Excel, students will learn how to effectively use spreadsheets for personal and business tasks. Students will learn basic principles such as formatting a workbook, working with formulas and functions, and creating charts and tables. Students will also learn important spreadsheet concepts such as order of precedence in formulas, function syntax, absolute and relative cell references, what-if analysis, and data validation.

### **CAPP266 ADVANCED MS EXCEL**

*Credits: 3*

**Pre-requisite(s): A "C-" or higher in CAPP156 or CSCI172**

This is an advanced course that builds upon the skills learned in CAPP156 - MS Excel or CSCI

### **CHMY121 INTRODUCTION TO GENERAL CHEMISTRY**

*Credits: 4*

**Pre-requisite(s): A "C-" or higher in M093 or satisfactory score on placement test**

This course is designed to provide students with a working knowledge of the basic principles of chemistry and the physical world at a microscopic scale. Topics include the atomic model of matter, energy, chemical bonds and reactions, the states of matter, acids and bases, and an introduction to organic chemistry. The course integrates lecture, homework assignments and laboratory exercises to provide students practical examples of applications of course material to "real world" situations.

### **CHMY123 INTRODUCTION TO ORGANIC AND BIOCHEMISTRY**

*Credits: 4*

**Pre-requisite(s): A "C-" or higher in CHMY121 and CHMY122 or consent of instructor**

This course is designed to expand on the information presented in Introduction to General Chemistry, providing students with a working knowledge of the basics of organic and biologic chemistry. Topics include the basic organic functional groups and their reaction properties, and basic biologic molecules such as carbohydrates, lipids, proteins,

and enzymes and how these molecules form and function in biologic systems. The course integrates lecture, homework assignments, and lab exercises to provide students practical examples of applications of course material to "real world" situations.

### **CHMY141 COLLEGE CHEMISTRY I**

*Credits: 4*

**Pre-requisite(s): A "C-" or higher M121**

**Co-requisite(s): CHMY142**

This is the first semester of a two-semester college chemistry sequence. Topics covered include atomic structure, chemical reactions, stoichiometry, chemical bonding, the periodic table, and the states of matter. The experimental and mathematical aspects of chemistry are emphasized.

### **CHMY143 COLLEGE CHEMISTRY II**

*Credits: 3*

**Pre-requisite(s): A "C-" or higher in CHMY141 and M121**

**Co-requisite(s): CHMY144**

This is the second semester of a two-semester college chemistry sequence designed for students entering a science, engineering, or pre-med field of study. Covered topics include solution chemistry; chemical equilibria, kinetics, and thermodynamic; acids and bases; electrochemistry; and nuclear chemistry. Heavy emphasis will be placed the mathematical aspects of chemistry and on making connections to "real-world" applications of chemistry.

### **CHMY144 COLLEGE CHEMISTRY II LAB**

*Credits: 1*

**Pre-requisite(s): None**

**Co-requisite(s): CHMY143**

This is the lab portion of College Chemistry II. It is designed to reinforce the material covered in CHMY143.

### **CHMY221 ORGANIC CHEMISTRY I**

*Credits: 5*

**Pre-requisite(s): A "C-" or higher in CHMY143**

This is the first semester of a one-year sequence with emphasis on fundamental concepts of structure, nomenclature, properties and reaction mechanisms of organic compounds, and an introduction to biochemical molecules.

### **CHMY223 ORGANIC CHEMISTRY II**

*Credits: 3*

**Pre-requisite(s): A "C-" or higher in CHMY221/222**

**Co-requisite(s): CHMY224**



This is the second semester of a one-year sequence with emphasis on functional group interconversions, chemistry of aromatic compounds, multistep reaction pathways, molecular structure determinations using spectroscopic methods, retrosynthetic analysis, and introduction to biological chemistry. Laboratory included.

### **CHMY224 ORGANIC CHEMISTRY II LAB**

*Credits: 2*

**Pre-requisite(s):** A "C-" or higher in CHMY221/222

**Co-requisite(s):** CHMY223

This integral lab component is designed to reinforce the material covered in CHMY223 by providing students with a practical hands-on opportunity to execute and to observe supplemental exercises in a lab setting.

### **CHMY290 UNDERGRADUATE RESEARCH**

*Credits: 2*

**Pre-requisite(s):** Consent of Faculty Mentor

This course is designed to introduce students to the creative nature of advanced chemical research, and training in methods of synthesis, purification, analysis and characterization of chemical species not typically encountered in tradition one-year sequences of college chemistry and organic chemistry. Students investigate the chemical literature and participate in a research project under the guidance of the faculty mentor. Proper maintenance of a formal laboratory research notebook is required. Presentation of research findings through publication or presentation at a scientific meeting is expected.

### **CHMY292 CHEMISTRY INDEPENDENT STUDY**

*Credits: 1*

**Pre-requisite(s):** Consent of Instructor

This course is designed to meet specific learning needs of students in chemistry. Typically, such independent study projects focus on learning opportunities not otherwise offered at Helena College. Students investigate the chemical literature, and with the guidance of the instructor initiate a research proposal for a project to be completed within the semester. Upon completion of the project, a formal written and/or oral presentation is required.

### **CJUS121 INTRODUCTION TO CRIMINAL JUSTICE**

*Credits: 3*

**Pre-requisite(s):** Placement into WRIT101 or WRIT101 taken concurrently with CJUS121

This course is a survey of the history and philosophy of American justice concepts with the emphasis on present day practical application through the efforts of the law

enforcement, court, and correction segments of the criminal justice system.

### **COMX106 COMMUNICATING IN A DYNAMIC WORKPLACE**

*Credits: 2*

**Pre-requisite(s):** None

Students will study human behavior and personality, self-management, self-development, and elementary business psychology. Classroom focus is on career planning and job search: in a way that supplements writing instruction, students will develop skills to prepare and present resumes, cover letters, and other communications involved in obtaining a job. This class is a requirement for the Professional Technical programs.

### **COMX111 INTRODUCTION TO PUBLIC SPEAKING**

*Credits: 3*

**Pre-requisite(s):** None

Development of oral communication skills through an emphasis on audience analysis, organization of ideas, and the delivery of spoken messages.

### **COMX115 INTRODUCTION TO INTERPERSONAL COMMUNICATION**

*Credits: 3*

**Pre-requisite(s):** None

The purpose of this course is for students to become aware of their present communication styles and decide what is effective and what can be improved in order to build healthier relationships on an interpersonal level. Students will learn skills to help them manage conflict both in personal relationships and professional relationships. Communication will be viewed from both a verbal and nonverbal perspective. Communicating more clearly and listening more effectively will be addressed as well as the following topics: creating identities through communication, communication and emotion, interpersonal conflict management, creating healthy communication climates, gender communication, and cultural diversity and communication.

### **COMX298 INTERNSHIP**

*Credits: 1*

**Pre-requisite(s):** Consent of Instructor Required

This course is designed for the student who takes the initiative to perform work outside of and in addition to the normal college curriculum. If done properly, it can be a highly rewarding experience and aid the student's transition from college to work. Internship plans need approval from Department Administration and HR. Contact your program advisor for paperwork and procedural information.

## **CRWR240 INTRODUCTION TO CREATIVE WRITING WORKSHOP**

*Credits: 3*

**Pre-requisite(s): None**

This course is designed to give students experience with generating and developing original works of poetry and short fiction through two methods: analysis and discussion of works by practicing authors, and drafting and polishing their own work through workshops and writing tanks.

## **CSCI100 INTRODUCTION TO PROGRAMMING**

*Credits: 3*

**Pre-requisite(s): None**

This course is an introduction to elementary programming techniques using modern programming languages. A wide range of programs will be written by the student and run on a computer. Students learn the techniques of looping, functions and sub/routines, arrays, variables and data types, user input/output, file input/ output and appropriate programming practices.

## **CSCI107 JOY AND BEAUTY OF COMPUTING**

*Credits: 3*

**Pre-requisite(s): None**

This course examines the computing field and how it impacts the human condition. Introduces exciting ideas and influential people. Provides a gentle introduction to computational thinking using the Python programming language.

## **CSCI111 PROGRAMMING WITH JAVA I**

*Credits: 4*

**Pre-requisite(s): A "C-" or higher in CSCI100**

This course offers a thorough introduction to the concepts behind object-oriented software development, including the terminology and methodologies utilizing the Java Programming Language. This course provides the student with the fundamentals of programming with a focus on object-oriented techniques. These skills are needed to work effectively in the area of information technology. The ability to understand the relationship between data and the algorithmic manipulation of data is crucial in IT related fields.

## **CSCI121 PROGRAMMING WITH JAVA II**

*Credits: 4*

**Pre-requisite(s): A "C-" or higher in CSCI111**

This course covers some of the more advanced topics of Java Standard Edition. Topics covered include Java integration to databases (JDBC), Generics, Collections, Object Serialization, Network Sockets, Advanced GUI development with Swing components, and multi-threaded

applications. This course does NOT cover Servlets or Java Server Pages as they are covered in CT262.

## **CSCI127 THE JOY AND BEAUTY OF DATA**

*Credits: 3*

**Pre-requisite(s): A "C-" or higher in CSCI 111 or consent of Instructor**

Provides a gentle introduction to the exciting world of big data and data science. Students expand their ability to solve problems with Python by learning to deploy lists, files, dictionaries and object-oriented programming. Data science libraries are introduced that enable data to be manipulated and displayed.

## **CSCI172 INTRODUCTION TO COMPUTER MODELING**

*Credits: 3*

**Pre-requisite(s): None**

This course provides problem solving with spreadsheets and databases using the computer to analyze a set of data; presentation of results of analysis.

## **CSCI194 CT SEMINAR**

*Credits: 2*

**Pre-requisite(s): None**

This course introduces students to the information technology industry and covers basic technology literacy skills and concepts. Students will set educational goals and begin creating their portfolio.

## **CSCI206 .NET APPLICATIONS**

*Credits: 4*

**Pre-requisite(s): A "C-" or higher in CSCI111 and CSCI240**

This course covers advanced desktop and web application features of the .NET framework. Students will learn Exception Handling, Collections, Linq, Generics, Multithreading, .NET ADO.NET, ADO.NET Entity Framework, ASP.NET Web Forms and MVC, and Object Oriented Programming. Students will use C# language and Microsoft SQL Server for all projects.

## **CSCI210 WEB PROGRAMMING**

*Credits: 3*

**Pre-requisite(s): A "C-" or higher in CSCI100, CSCI240, and MART145**

This course provides students with skills necessary to use the PHP scripting language to develop dynamic Web-based applications. Topics of study include the fundamentals of the scripting, using PHP with HTML forms, creating functions, and integrating with MySQL databases.

### **CSCI211 CLIENT SIDE WEB DEVELOPMENT**

*Credits: 3*

**Pre-requisite(s): A "C-" or higher in CSCI100 and MART145**

This course focuses on the concepts client side web development including AJAX Development covering JavaScript, DOM, XML, and Asynchronous page updates.

### **CSCI212 WEB SERVER ADMINISTRATION**

*Credits: 3*

**Pre-requisite(s): A "C-" or higher in ITS224, ITS280, and ITS164 or NTS104**

In this course, students explore issues dealing with building and managing a web server. Topics will include web server and network issues, Domain Name System, TCP/IP connectivity, server setup, web site administration, Internet commerce, and security. Students will implement web servers using Apache and IIS.

### **CSCI221 SYSTEMS ANALYSIS AND DESIGN**

*Credits: 4*

**Pre-requisite(s): A "C-" or higher in CSCI240 and WRIT101 or WRIT121T or concurrently enrolled, or consent of Instructor**

This course studies the concepts and skills needed to analyze and design information systems. The primary focus in this course is to prepare the student to understand the systems development life cycle. Special emphasis is placed on business functions, process flows, dataflow diagramming, entity relationship diagramming, and database requirements. Students will be required to complete a semester project which includes a report and presentation.

### **CSCI221 SYSTEMS ANALYSIS AND DESIGN**

*Credits: 4*

**Pre-requisite(s): A "C-" or higher in CSCI240 and WRIT101 or WRIT121T or concurrently enrolled, or consent of Instructor**

This course studies the concepts and skills needed to analyze and design information systems. The primary focus in this course is to prepare the student to understand the systems development life cycle. Special emphasis is placed on business functions, process flows, dataflow diagramming, entity relationship diagramming, and database requirements. Students will be required to complete a semester project which includes a report and presentation.

### **CSCI236 XML DATA PROCESSING**

*Credits: 2*

**Pre-requisite(s): A "C-" or higher in CSCI240**

The course studies the use of XML data in data processing and its use in data transmission between organizations. Students will learn to create and validate XML data

documents. Students will create applications that generate, transform, query, and transmit XML data. Students will create applications that manipulate XML data using professional software development tools on multiple platforms.

### **CSCI238 STANDARDS BASED MOBILE APPLICATIONS**

*Credits: 3*

**Pre-requisite(s): A "C-" or higher in CSCI111 and MART145**

This is an introductory course in developing mobile applications utilizing industry standard languages, tools, and frameworks. Applications will be created using standards based HTML 5, Cascading Style Sheets (CSS) 3, and JavaScript along with frameworks to assist in the deployment to different mobile platforms. Frameworks such as PhoneGap will be utilized to gain access to platform devices and sensors.

### **CSCI240 DATABASES AND SQL**

*Credits: 3*

**Pre-requisite(s): None**

This course focuses on the concepts of relational databases and includes tables, records and typed fields, primary and foreign keys, and database normalization, and a thorough coverage of Structured Query Language "SQL". Through a variety of exercises, the student will learn how to model a business enterprise using the entity-relationship approach to relational database design. The Oracle database is used for all exercises.

### **CSCI245 MODERN DATABASE SYSTEMS**

*Credits: 3*

**Pre-requisite(s): A "C-" or higher in CSCI111 and CSCI240**

This course is a survey of modern relational and non-relational databases and their design and implementation. Hands on experience will be gained by working several different database management systems. Database selection and tradeoffs based on problem requirements will be a major focus.

### **CSCI257 WEB SERVICES**

*Credits: 3*

**Pre-requisite(s): A "C-" or higher in CSCI111 and CSCI240**

This course covers the creation, deployment, consumption and orchestration of SOAP and RESTful Web Services. Both the Service Oriented and Microservice Architectures will be covered. Students will create services that produce and consume both XML and JSON data formats.

### **CSCI276 APPLICATION SECURITY**

*Credits: 2*

**Pre-requisite(s):** A "C-" or higher in CSCI111 and CSCI240

The course studies the best practices in the development of secure software applications. Through code reviews, students will analyze and test application code for security vulnerabilities such as SQL injection, XML injection, cross site scripting, buffer overflow, and improper error handling. Students will analyze different types of security attacks and discuss countermeasures to safeguard applications and data. Security issues of particular programming languages, platforms, and application types will also be discussed. Network and physical security are not covered in this course but are covered in ITS 218 Network Security.

### **CSCI292 INDEPENDENT STUDY**

*Credits: 1*

**Pre-requisite(s):** Upon instructor approval

This course is designed to meet specific learning needs of students. Typically, such independent study projects focus on learning opportunities not otherwise offered in our college curriculum. The student must seek prior approval of an instructor willing to serve as faculty sponsor. The student then initiates a proposal describing, among other things, the number of hours to be spent on the study project, specific learning outcomes, and how evaluation is to be accomplished. The approved proposal will have signatures of the student, faculty sponsor, Division Director, and Executive Director of Enrollment office.

### **CSCI298 INTERNSHIP**

*Credits: 1*

**Pre-requisite(s):** Upon instructor approval

This course is designed for the student who takes the initiative to perform work outside of and in addition to the normal school curriculum. If done properly, it can be a highly rewarding experience and aid the student's transition from school to work.

### **CSCI299 THESIS/CAPSTONE**

*Credits: 2*

**Pre-requisite(s):** Upon Instructor approval

This course is a self-directed, integrated, and applied learning opportunity that integrates the coursework, knowledge, and skills gained in Computer Technology coursework. Students will be matched with an organization that needs assistance on an Information Technology project. Students will work with the organization and assigned Computer Technology Faculty to complete project. Project demonstration and required documentation will be presented at project completion.

### **DDSN135 SOLIDWORKS 1**

*Credits: 2*

**Pre-requisite(s):** None

Upon completion of this course the student will know the user interface of the 3D modeling software. The student will learn to create sketches and turn them into parametric features, modify and edit the features to create parts for assemblies. The student will know how to assembly the parts (individual drawings) and mate them to one another, create a simulation of movement to detect interference, and export files for 3D printing. The student will learn to operate and maintain 3D printers to print their projects for assembly.

### **DST107 PRECISION MEASUREMENT**

*Credits: 1*

**Pre-requisite(s):** DST 112

This course is designed to instruct students on how to perform precision measurements including the use of micrometers; dial gauges; protractors, tape and rule measurements; calipers; thread pitch; and dial bore gauges.

### **DST108 INDUSTRIAL PRACTICES FOR DIESEL TECHNOLOGY**

*Credits: 3*

**Pre-requisite(s):** None

This course will introduce students to the safety requirements and common shop practices of the diesel and heavy equipment industry. Personal safety as well as overall shop/job site safety will be emphasized while students learn to operate shop equipment, identify and assemble common components, and make repairs common to all aspects of the diesel and heavy equipment industry. Skills learned in this course will be directly applied throughout the diesel technician program. Students will receive instruction on the safe operation of a lift truck. Students will receive instruction an OSHA 10 certification. This course will also teach basic welding skills needed to adequately and safely make minor repairs to diesel equipment.

### **DST112 DIESEL ELECTRICAL SYSTEMS**

*Credits: 5*

**Pre-requisite(s):** None

This course is designed to give students basic electrical knowledge. The course progresses from electrical theory, circuits and circuit failure, and components of the starting and accessory systems. Emphasis will be placed on developing the knowledge base needed for diagnosing and repairing diesel equipment electrical systems. The second half of the course will have emphasis on developing the knowledge base needed for charging system, circuit diagnosing, diesel computer control systems, and repairing

of diesel equipment electrical systems. It is also designed to provide hands-on activities common to diesel equipment electrical applications.

### **DST130 DIESEL HVAC**

*Credits: 4*

**Pre-requisite(s): A "C-" or higher in DST112**

This course is designed to provide Diesel Technology students with the knowledge and skills required to understand service and repair of mobile air conditioning systems as used in the Diesel industry. Component Functions and EPA Requirements are covered in this course.

### **DST142 HYDRAULICS**

*Credits: 7*

**Pre-requisite(s): A "C-" or higher in DST 112**

**Co-requisite(s): M111T**

This is an introductory course that will cover the basic theory and understanding of hydraulic principles as related to many components and systems covered in the advanced courses in the Diesel Technology program. In addition to the basic theory, the function of basic systems and components will be discussed. Using school owned hydraulic mock-ups the students will disassemble, inspect, and reassemble hydraulic pumps, motors, cylinders, and electric and manual control valves. Students will learn how to read schematics and create a functioning hydraulic circuit.

### **DST145 DIESEL ENGINE REPAIR**

*Credits: 6*

**Pre-requisite(s): A "C-" or higher in DST112 AND DST142**

The course is designed to provide students with the knowledge and skills required to understand and repair various engine systems as used in the heavy-duty, diesel powered, on and off road equipment industry. Emphasis will be placed on pre-electronic diesel engines.

### **DST200 DIESEL ENGINE PERFORMANCE**

*Credits: 6*

**Pre-requisite(s): DST112, DST145**

This is an advanced level course offered to second-year, Diesel Technology students. This course builds upon the knowledge and skills attained in the first-year course DST112 as well as DST145 to solve diesel engine performance problems. Students are exposed to maintenance, diagnostic and repair experiences involving a variety of systems on diesel-powered equipment. The diesel engine systems included are starting, instrumentation, as well as diesel engine mechanical fuel systems, electronic engine control, and tune-up.

### **DST210 DIESEL MAINTENANCE PRACTICES**

*Credits: 5*

**Pre-requisite(s): A "C-" or higher in DST112 and DST145**

This is a preventative maintenance course for heavy-duty, diesel powered, on and off road equipment. This course familiarizes the student with routine service, inspection and; adjustment of the following component/systems: engine, power train, hydraulic, pneumatic, electrical, steering, braking, cooling, and air intake systems. Lubricants, fuels and filters will also be included. Students will also be exposed to annual Department of Transportation inspection of heavy-duty diesel trucks.

### **DST211 ELECTRONIC SYSTEMS**

*Credits: 6*

**Pre-requisite(s): A "C-" or higher in DST112**

This course provides a review of electrical systems and introduces electronic theory and applications as used in medium and heavy duty vehicles. Emphasis is placed on the basic function and operation of semiconductor and integrated circuits. Upon completion students should be able to identify electronic components, explain their use, function and use meters and flow charts to diagnose and repair systems.

### **DST240 HD MANUAL DRIVE TRAINS**

*Credits: 5*

**Pre-requisite(s): A "C-" or higher in DST112**

This course includes the basic fundamentals of manual drive trains including power flow, ratios, gears, bearings, and seals. With removal, troubleshooting, repair, and replacement of clutches, transmissions, drive lines, drive axles, final drives, power takeoffs, and specialty drives that are related to heavy-duty, diesel powered, on and off road equipment.

### **DST245 HD HYDRAULIC DRIVE TRAIN**

*Credits: 3*

**Pre-requisite(s): DST112, and DST142**

This course covers the fundamentals, operation, and diagnosis and repair of hydrostatic and power shift transmissions, torque converters and torque dividers that are related to the heavy duty, diesel powered, on and off road equipment.

### **DST255 HD BRAKES AND UNDERCARRIAGE**

*Credits: 7*

**Pre-requisite(s): A "C-" or higher in DST112**

This course covers the adjustment, maintenance, troubleshooting, and repair of heavy-duty air-actuated brakes, dual air system valves and circuits, heavy-duty ABS systems, and hydraulic-assisted brakes as used with on and off road diesel powered equipment. This course also

includes maintenance, adjustment, and repair of suspension systems as used with tandem axle diesel trucks and off-road equipment. Students will be exposed to alignment of solid I-beam front axles and 5th wheels as related to heavy-duty trucks.

### **DST265 APPLIED LAB EXPERIENCE**

*Credits: 3*

**Pre-requisite(s): 2nd year standing or consent of instructor**

This course is intended to introduce students to live, practical lab experiences involving subject matter previously covered in other courses. When provided with diesel powered equipment in need of maintenance, service, inspection, or repair of any component or system that the student has had previous instruction while in the program, the student will interact with the customer/operator, generate the work order, and in a safe, efficient, and organized manner, set about to perform the proper operations needed to place equipment back into operation, and complete documentation needed to close work order. This will be accomplished to meet customer requests, industry standards, and instructor's satisfactory critique of student performance and productivity with available resources.

### **DST292 INDEPENDENT STUDY**

*Credits: 1*

**Pre-requisite(s): Consent of instructor and approval of the Division Director**

This course is designed to meet specific learning needs of students. Typically, such independent study projects focus on learning opportunities not otherwise offered in our college curriculum. The student then initiates a proposal describing, among other things, the number of hours to be spent on the study project, specific learning outcomes, and how evaluation is to be accomplished. The approved proposal will have signatures of the student, faculty sponsor, Division Director, and Executive Director of Enrollment office.

### **DST295 APPLIED FIELD WORK**

*Credits: 4*

**Pre-requisite(s): Second year standing or consent of instructor**

This course will build upon the applied lab course and students will have increased interaction and exhibit effective communication as would be expected in a field experience. Students will perform tasks to repair equipment back to working order and complete all documentation to close out the work order. Students will be expected to perform duties with minimal instruction but under close supervision.

### **DST298 INTERNSHIP**

*Credits: 1*

**Pre-requisite(s): Consent of instructor and approval of the Division Director**

This course enhances classroom learning with a real life work experience. The host employer provides on-the-job training. The student intern will gain valuable work experience and interact with professional technicians and management personnel. The approved proposal will have signatures of the student, faculty sponsor, Division Director, and Executive Director of Enrollment office.

### **ECNS201 PRINCIPLES OF MICROECONOMICS**

*Credits: 3*

**Pre-requisite(s): None**

The course studies the market behavior of individuals, households, and businesses, focusing on how individual choice influences and is influenced by economic forces. Areas of study include individual decision making, pricing, supply and demand functions of firms, market structures, impacts of the government sector, and impacts of distribution of income alternatives.

### **ECNS202 PRINCIPLE OF MACROECONOMICS**

*Credits: 3*

**Pre-requisite(s): None**

The course studies the market as a whole, focusing on aggregate relationships such as unemployment, inflation, and business cycles. Areas of study include aggregate supply and demand, fiscal policy, money and banking, monetary policy, economic growth, impacts of government budget and deficit financing, and consequences of international trade.

### **ECP130 EMERGENCY MEDICAL TECHNICIAN**

*Credits: 5*

**Pre-requisite(s): Require Hepatitis B vaccines, TB test (current or within past 6 months)**

The purpose of Emergency Medical Technician (EMT) course is to provide students with an academic and working knowledge to provide basic life support care to critically ill or injured patients. The course provides the basic concepts of emergency care which are needed to function as an EMT. EMTs learn to manage an airway using artificial devices, assess the severity of illness or injury, manage wounds and bleeding, immobilize fractures, perform CPR, utilize an automated defibrillator, assist with the administration of some medications, and a host of other procedures. This course involves classroom and clinical experience. This course may be helpful for other healthcare fields.

### **ECP133 ADVANCED EMERGENCY MEDICAL TECHNICIAN**

*Credits: 5*

**Pre-requisite(s):** ECP130 OR currently licensed by the State of Montana and/or registered as an "active" Emergency Medical Technician.

The focus of study in Advanced Emergency Medical Technician will provide the student knowledge and skills needed to apply basic and limited advanced emergency medical care and transportation for critical and emergent patients who access the emergency medical system. Advanced Emergency Medical Technicians function as part of a comprehensive EMS response and perform interventions with the basic and advanced equipment typically found on an ambulance.

### **EDU231 LITERACY AND LITERATURE FOR CHILDREN**

*Credits: 3*

**Pre-requisite(s):** A "C-" or higher in WRIT101

A survey of children's books with an emphasis on their use in K-8 classrooms. Introduces the history and current genres of children's literature. Students will become aware of selection criteria, award-winning books, and strategies for sharing books with students.

### **EDU297 METHODS: K-8 MUSIC**

*Credits: 2*

**Pre-requisite(s):** None

The course is designed for elementary education students. The course introduces basic concepts, skills, and vocabulary in music for the elementary teachers. Students will participate in musical activities appropriate for the elementary classroom. Integration of musical experiences with other subject areas as a way to enhance student learning is explored. Students will practice lesson creation, delivery, and assessment to serve as development as a teacher.

### **ENSC105 ENVIRONMENTAL SCIENCE**

*Credits: 3*

**Pre-requisite(s):** None

This course is designed to introduce students to important science-related issues in the world around us. The class will examine environmental issues on global, regional, and local scales. Class discussions and activities will emphasize the basic scientific principles needed to evaluate scientific problems relevant to environmental issues.

### **ENST230 NATURE AND SOCIETY**

*Credits: 3*

**Pre-requisite(s):** A "C-" or higher WRIT101 or WRIT121T

This course is designed to provide students with an understanding of the relationship between human society and the environment and how it has changed through the growth of modern civilization. The course applies the idea that true environmental studies are a mixture of multiple disciplines and not just a science topic. The course is presented to allow students flexibility to draw and present their own conclusions, similar to a philosophy course in the humanities. Students will read from multiple sources and class discussions will reflect topics of student interest and their applications to modern society.

### **FIRE101 INTRODUCTION TO FIRE SERVICE**

*Credits: 3*

**Pre-requisite(s):** None

This course provides an overview to fire protection and emergency services; career opportunities in fire protection and related fields; culture and history of emergency services; fire loss analysis; organization and function of public and private fire protection services; fire departments as part of local government; laws and regulations affecting the fire service; fire service nomenclature; specific fire protection functions; basic fire chemistry and physics; introduction to firefighting apparatus, hose, appliances, and tools; introduction to fire protection systems; introduction to fire strategy and tactics; life safety initiatives.

### **FIRE102 INTRODUCTION TO FIRE SERVICE 2**

*Credits: 3*

**Pre-requisite(s):** None

**Co-requisite(s):** FIRE101

Fire Service 2 is a continuation of Introduction to the Fire Service. This course continues coverage of information to understand the fire protection career field. Terms, facts, and pieces of equipment used by the fire service will be utilized in preparation for Firefighter One certification.

### **FIRE103 FIRE FIGHTER SAFETY**

*Credits: 3*

**Pre-requisite(s):** None

This course introduces the basic principles and history related to the national firefighter life safety initiatives, focusing on the need for cultural and behavioral change throughout the emergency services. Emphasis is placed on the development and use safe working practices related to the hazards of fire service operations, including rapid intervention evolutions. The course covers the 16 life safety initiatives and OSHA and NFPA standards relating

to firefighter safety, as well as, types of personal protection equipment and its use and care.

### **FIRE106 WILDLAND FIRE FIGHTING**

*Credits: 3*

**Pre-requisite(s): None**

This course introduces the methods, equipment, and terminology specific to wildland firefighting. This course meets or exceeds the minimum requirements for the National Wildland Coordinating Group (NWCG) Firefighter II qualification as defined in the NWCG 310-1.

### **FIRE107 PERSONAL PHYSICAL FITNESS I**

*Credits: 1*

**Pre-requisite(s): None**

Emergency personnel must maintain healthy physical conditioning to handle the physical demands of responding to emergency incidents. Students in this course will learn effective workout habits and improve their own body conditioning.

### **FIRE108 PERSONAL PHYSICAL FITNESS II**

*Credits: 1*

**Pre-requisite(s): None**

Emergency personnel must maintain healthy physical conditioning to handle the physical demands of responding to emergency incidents. Students in this course will learn the importance of choosing and maintaining a career-long lifestyle that includes good nutrition and physical conditioning.

### **FIRE110 HAZARDOUS MATERIALS**

*Credits: 3*

**Pre-requisite(s): None**

This course covers a basic introduction to hazardous materials, their definition types, hazards, and characteristics. Students will be introduced to hazardous materials and the first responder's responsibility when responding to a hazardous materials incident.

### **FIRE120 EMERGENCY SERVICES CUSTOMER SERVICE**

*Credits: 2*

**Pre-requisite(s): None**

This course will familiarize the student with the techniques necessary to establish positive relationships with the community, the fire service, and all other groups that are called upon to mitigate the effects of emergency and disaster situations. The student will become familiar with basic emergency policies dealing with equal employment

opportunities, discrimination, and harassment and develop a professional self-image.

### **FIRE125 EMERGENCY EQUIPMENT MAINTENANCE**

*Credits: 2*

**Pre-requisite(s): None**

This course provides practical experience with the proper maintenance of all types of emergency equipment. The maintenance of firefighting and medical emergency equipment will be taught along with the basic maintenance of emergency vehicles.

### **FIRE131 FIRE APPARATUS AND HYDRAULICS**

*Credits: 3*

**Pre-requisite(s): None**

This course covers the operation of various types of firefighting apparatus such as pumpers, aerial apparatus, aircraft crash vehicles, and other support vehicles.

### **FIRE140 FIRE FIGHTING TACTICS AND STRATEGIES**

*Credits: 3*

**Pre-requisite(s): None**

Basic firefighting tactics and strategy used in all types of fire emergencies are taught in this course. Pre-planning, size-up, and application of tactics based on the selected strategy are described and simulated for student learning.

### **FIRE180 INCIDENT COMMAND**

*Credits: 2*

**Pre-requisite(s): None**

A firefighting team needs to know who is in charge and how to effectively respond to the incident commander. This course focuses on the vital importance of incident command and commonly accepted practices.

### **FIRE210 AIRCRAFT RESCUE AND FIRE FIGHTING BASIC TRAINING**

*Credits: 2*

**Pre-requisite(s): Students must be physically able to secure SCBA's, perform physically demanding tasks, and supply their own NFPA approved clothing.**

This course is aimed at providing students with the fundamental knowledge and skills necessary to effectively handle an aircraft emergency in accordance to FAR 139. It will contribute to the student's knowledge of basic firefighting and rescue principles.



### **FIRE215 FIRE STREAMS**

*Credits: 2*

**Pre-requisite(s): A "C-" or higher in FIRE130**

A fire fighter must be capable of understanding and calculating water hydraulics and fire stream flows in order to perform basic fire suppression duties as a member of a team. This course emphasizes the importance of fire streams.

### **FIRE225 FIRE OFFICER**

*Credits: 2*

**Pre-requisite(s): A "C-" or higher in FIRE120**

The duties of a fire officer at the company level in the fire service are taught in this course. Students will gain valuable leadership experience while performing the roles and responsibilities of a fire officer.

### **FIRE232 BASIC WILDLAND SUPERVISION**

*Credits: 2*

**Pre-requisite(s): A "C-" or higher in FIRE106**

Basic supervision of wildland firefighting crews and equipment is covered as well as intermediate fire behavior. Effective use of personnel and equipment as well as resource typing will be emphasized.

### **FIRE234 FIRE PROTECTION SYSTEMS**

*Credits: 3*

**Pre-requisite(s): None**

This course covers fire and smoke behavior with emphasis placed on detection, suppression, and the methods of automatic and manual extinguishment. Detection and sprinkler systems will be discussed.

### **FIRE241 FIRE INSPECTION**

*Credits: 3*

**Pre-requisite(s): None**

This class focuses on codes, prevention, and inspections. It covers the basic information required to complete a basic fire inspection and serves as an introduction to the codes and regulations that apply to building inspection.

### **FIRE242 RESCUE**

*Credits: 3*

**Pre-requisite(s): A "C-" or higher in FIRE101 and FIRE103**

Basic rescue techniques, tools, and equipment are covered in this class. Students will participate in auto extrication and high-angle rescue techniques.

### **FIRE250 FIRE GROUND OPERATIONS**

*Credits: 2*

**Pre-requisite(s): A "C-" or higher in FIRE101, FIRE103, FIRE130, and FIRE242**

Individuals working together as a functional company unit will prepare for and demonstrate to State Certifications. This class monitors the knowledge and physical ability to perform the tasks required by the certification process.

### **FIRE260 FIRE INVESTIGATION**

*Credits: 3*

**Pre-requisite(s): None**

This course covers basic fire cause determination techniques. Students will learn to find the area of origin, how the fire started, and the basics of arson detection and prosecution.

### **FIRE261 BUILDING CONSTRUCTION FOR FIRE PROTECTION**

*Credits: 2*

**Pre-requisite(s): None**

This course provides the components of building construction related to firefighter and life safety. The elements of construction and design of structures are key factors when inspecting buildings, pre-planning fire operations, and operating at emergencies.

### **FIRE270 FIRE PREVENTION**

*Credits: 3*

**Pre-requisite(s): None**

Students are provided fundamental information regarding the history and philosophy of fire prevention. Topics included are the organization and operation of a fire prevention bureau, use of fire codes, identification and correction of fire hazards, the relationship between fixed fire suppression systems, fire loss mitigation, fire inspections, and fire and life safety public education programs.

### **FIRE275 FIRE SERVICE INSTRUCTOR**

*Credits: 2*

**Pre-requisite(s): None**

Students will learn the basics of training other fire fighters at the company, battalion, or department level. Various methods of instruction, testing, and delivery will be discussed and practiced along with utilizing sources of instructional materials and the legal restrictions placed upon them.

## **FIRE288 CAPSTONE**

*Credits: 2*

**Pre-requisite(s): A "C-" or higher in FIRE101**

This capstone course is designed to assist the fire fighting student to synthesize prior knowledge gained in the fire fighting curriculum. This course also provides the student information regarding the current status of fire fighting. This course is also designed to meet specific learning needs of students in their final semester of course study. There are independent study projects focusing on learning opportunities not otherwise offered in our college curriculum. Among the choices offered to the student, they may design projects within this course to target their own learning needs. The student must seek prior approval of an instructor willing to serve as faculty sponsor. The student then initiates a proposal describing specific learning outcomes and an evaluation process for the projects. Final grading in the course also depends on the student successfully preparing a comprehensive report and presenting to the sponsoring organization and/or peers.

## **FIRE298 FIRE SERVICE INTERNSHIP**

*Credits: 2*

**Pre-requisite(s): EMT-B Registry, third semester standing**

The student will report for duty with a combat shift of firefighters in an approved uniform with proper personal protective equipment. The student will be assigned to a firefighter mentor who will demonstrate the duties of a firefighter during real working shifts. The student will participate in all activities that the firefighters would be expected to perform during normal working days including physical training, equipment inspections and maintenance, station cleanup, drills, training, fire inspections, and emergency response. The student will not be allowed to perform any offensive firefighting duties that would require entering an IDLH atmosphere. The student will not be allowed to drive the host fire department's apparatus.

## **FRCH101 ELEMENTARY FRENCH I**

*Credits: 4*

**Pre-requisite(s): None**

This introductory course prepares students for basic communication in French and presents fundamentals of the language holistically through listening, speaking, reading, and writing. This course also explores cultural information.

## **FRCH102 ELEMENTARY FRENCH II**

*Credits: 4*

**Pre-requisite(s): A "C-" or higher FRCH101**

This course continues and builds on basic communication in French and presents more in-depth aspects of the language holistically through listening, speaking, reading, and writing. The course also explores cultural information.

## **FRCH102 ELEMENTARY FRENCH II**

*Credits: 4*

**Pre-requisite(s): A "C-" or higher FRCH101**

This course continues and builds on basic communication in French and presents more in-depth aspects of the language holistically through listening, speaking, reading, and writing. The course also explores cultural information.

## **GEO101 INTRODUCTION TO PHYSICAL GEOLOGY**

*Credits: 4*

**Pre-requisite(s): None**

This course is an introduction to geologic principles, with an emphasis upon geologic processes (plate tectonics, mountain building, weathering, and erosion); the rock cycle and individual rock types (igneous, sedimentary, and metamorphic); and geologic hazards (volcanoes and earthquakes). Other topics covered in the course include: geologic time; water and mineral resources; landforms; deserts; and glaciers. The laboratory portion of this course will include mineral and rock identification; topographic map reading; basic interpretation of geologic maps; and other activities directly related to topics covered in lecture. It is recommended students have strong algebra skills.

## **GPHY111 PHYSICAL GEOGRAPHY AND LAB**

*Credits: 4*

**Pre-requisite(s): None**

This lecture and lab course serves as an introduction to the manner in which natural systems function at global and regional scales. The lecture part of the course uses a geographical perspective to analyze landforms, climate, the water cycle, and the biosphere, examining spatial relationships and regional variations and addressing spatial patterns of human activity as related to environmental phenomenon. The lab component of the course introduces the students to concepts and techniques needed to understand and analyze the information contained in the course as well as exercises on various types of maps, graphs, aerial photos, imagery, and other graphics and geographic data sets.

## **GPHY111 PHYSICAL GEOGRAPHY AND LAB**

*Credits: 4*

**Pre-requisite(s): None**

This lecture and lab course serves as an introduction to the manner in which natural systems function at global and regional scales. The lecture part of the course uses a geographical perspective to analyze landforms, climate, the water cycle, and the biosphere, examining spatial relationships and regional variations and addressing spatial patterns of human activity as related to environmental

phenomenon. The lab component of the course introduces the students to concepts and techniques needed to understand and analyze the information contained in the course as well as exercises on various types of maps, graphs, aerial photos, imagery, and other graphics and geographic data sets.

### **GPHY121 HUMAN GEOGRAPHY**

*Credits: 3*

**Pre-requisite(s): None**

This course provides exposure to the major themes of human geography. Introduction to Human Geography focuses upon the linkages between geography and society including analysis of regions, ethnic groups, urban landscapes, migration and population change, geopolitics, economics, and cultural differences.

### **HEE202 INSTRUCTIONAL STRATEGIES IN ELEMENTARY PHYSICAL EDUCATION**

*Credits: 3*

**Pre-requisite(s): None**

This course is designed for elementary education students. It focuses on applying educational theory in planning, analyzing and presenting learning experiences to typical and atypical populations in elementary school physical education. Active participation is required.

### **HEO100 COMMERCIAL TRUCK DRIVER**

*Credits: 4*

**Pre-requisite(s): None**

This course is designed to prepare students to obtain a commercial driver's license. Students will be trained in 90 hours of theory which will involve both lecture and lab time and will then have 30 hours of behind the wheel time.

### **HONR121 WAYS OF KNOWING**

*Credits: 3*

**Pre-requisite(s): A "C-" or higher in WRIT101**

Using a diverse selection of readings representing more than three thousand years of history and numerous cultures, we will explore various ways of knowing, including rational/quantitative, relational/sympathetic, sensory/empirical, and narrative/mythological ways of knowing. In the process we will become acquainted with some of the great ideas about the divine, the natural world, and the self in solitude and society. We will be alert for cracks in our apparent certainties and consolations in the midst of our doubts. As we look into our texts, we will also consider the ethical implications that flow from their various perspectives. Informed by class readings, plenary lectures, and discussions, students will work toward a deeper understanding of their own ways of knowing.

### **HSTA101 AMERICAN HISTORY I**

*Credits: 3*

**Pre-requisite(s): None**

A survey of the political, constitutional and diplomatic history, economic history, and social, intellectual and cultural history of the United States from the first settlement to the Civil War. Emphasizes a substantive understanding of the events, trends, and personalities of U.S. history and the developmental of skills in analysis and communication.

### **HSTA102 AMERICAN HISTORY II**

*Credits: 3*

**Pre-requisite(s): None**

A survey of the political, constitutional and diplomatic history, economic history, and social, intellectual and cultural history of the United States from the Civil War to the present day. Emphasizes a substantive understanding of the events, trends, and personalities of U.S. history and the development of skills in analysis and communication.

### **HSTA160 INTRODUCTION TO THE AMERICAN WEST**

*Credits: 3*

**Pre-requisite(s): None**

A survey of the social, economic, political, and environmental history of the United States west of the Mississippi River from prehistory to the Second World War. This course emphasizes the analysis and interpretation of the events, trends, and personalities that characterized the American West and its impact on U.S. History.

### **HSTA215 POST-WW II AMERICA**

*Credits: 3*

**Pre-requisite(s): None**

This course provides a comprehensive overview of United States history from 1945 to the beginning of the Reagan Era in 1980. The course includes reading, lecture/discussions, and audio-visual materials that address key issues that faced the United States in the wake of World War II. Topics include the Cold War and nuclear weapons, Nixon, the civil rights movement, the Korean and Vietnam wars, popular culture, the Baby Boom, television, and the Space Program.

### **HSTA255 MONTANA HISTORY**

*Credits: 3*

**Pre-requisite(s): None**

This course is a comprehensive study of the social, economic, cultural, and political development of Montana, with an emphasis on critical reading, interpretation, research, and written analysis.

### **HTH201 Health Issues for Educators (Replaces HEE233)**

Updated 9/4/19

*Credits: 3*

**Pre-requisite(s): None**

Provides P-12 pre-service educators a foundation in the applied science of health and wellness. Exploration of components of a coordinated school health program and role state agencies provides understanding of legal requirements placed on schools. Students establish an understanding of family, school, and community influences on the health and well-being of young people. The Teacher's role in enhancing the health and wellness of school-aged children in the comprehensive school health program is explored.

### **ITS164 NETWORKING FUNDAMENTALS**

*Credits: 3*

**Pre-requisite(s): None**

This course is an introduction to networking fundamentals with both lecture and hands-on activities. Topics include the OSI model and industry standards, network topologies, IP addressing (including subnet masks), and basic network design. Concepts are reinforced with lab activities using equipment in live and simulated environments.

### **ITS212 NETWORK OPERATING SYSTEM - SERVER ADMIN**

*Credits: 3*

**Pre-requisite(s): A "C-" or higher in ITS280 and ITS164 or NTS104**

Students will create a virtual network composed of several virtual servers and install current Windows Servers OS to explore server based operating systems administration techniques. Emphasis will be on security practices, active directory structure, user administration, performance, resource sharing to include printers, and network access in the virtual environment.

### **ITS218 NETWORK SECURITY**

*Credits: 3*

**Pre-requisite(s): A "C-" or higher in ITS224 and ITS280,**

**Co-requisite(s): NTS105**

This seminar course focuses on network design as it relates to network security. Network architecture, Security, network administration, documentation. Other networking topics pertinent to today's network administrator are also included in this course. Hands-on labs conducted on live equipment and simulated network environments. This course builds on the command and principles in NTS105 - CCNA 2: Switching, Routing and Wireless Essentials.

### **ITS224 INTRODUCTION TO LINUX**

*Credits: 3*

**Pre-requisite(s): A "C-" or higher in CSCI100**

**Co-requisite(s): ITS280**

Students are introduced to accessing a multi-user system. They also learn to manage files and directories in a shared environment. Topics include simple user administration, scripts and network access.

### **ITS230 ADMINISTRATIVE SCRIPTING USING WINDOWS POWERSHELL**

*Credits: 2*

**Pre-requisite(s): A "C-" or higher in ITS280 and ITS164 or NTS104**

This course focuses on using PowerShell for administering and automating administrative tasks in Windows-based server environments. Command-line features and techniques including developing scripts used for session connectivity, workflow capabilities, and job scheduling will be covered. Using the Integrated Scripting Environment (ISE) to enable administrative script sharing will also be discussed.

### **ITS231 ADMINISTRATIVE SCRIPTING USING PYTHON**

*Credits: 2*

**Pre-requisite(s): A "C-" or higher in CSCI100, ITS280, and ITS164 or NTS104**

This course focuses on the fundamental concepts, principles, techniques, and tools, for developing simple interactive scripts in Python. All course content will focus on using Python for system, network, and database administration and security.

### **ITS255 IP TELEPHONY**

*Credits: 3*

**Pre-requisite(s): None**

**Co-requisite(s): NTS205 or a "C-" or higher in NTS105**

A fundamental course helping students add to their networking skills and gain essential Voice over IP (VoIP) knowledge, learn how and why VoIP works, and how to implement VoIP as part of a converged network. Technical terminology, concepts, and non-Cisco devices are discussed to broaden the students' knowledge base. Class lectures use technical jargon and detailed presentations to illustrate the subject matter. Wireshark is used to view packet/communication protocols across the IP network. Hands-on labs reinforce lecture content: setup, configuration and troubleshooting. Cisco Packet Tracer, network simulator, is used to create large networks not feasible on the live classroom equipment. IP networks using live Cisco routers, switches, and IP telephone equipment are used in configuration,

troubleshooting and teambuilding exercises. Cisco Call Manager Express (CME) software, imbedded in Cisco IOS 15.X, is utilized in these labs. Commands learned in NTS105 and NTS204 are applied in this course.

### **ITS274 ETHICAL HACKING AND NETWORK DEFENSE**

*Credits: 3*

**Pre-requisite(s):** A “C-“or higher in ITS224

**Co-requisite(s):** NTS204

This course expands students' understanding of issues related to cybersecurity. Students learn more advanced skills, such as ethical hacking/penetration testing, security testing and systems/network defense. Students learn how to protect networks by utilizing the techniques that attackers use to compromise network and systems security. Most labs are in a virtual environment where student are free to explore without actually damaging another system.

### **ITS280 COMPUTER REPAIR AND MAINTENANCE**

*Credits: 4*

**Pre-requisite(s):** None

This course is an in-depth exposure to computer hardware and operating systems focused on the current CompTIA A+ certification exam. Students learn: functionality of hardware, computer maintenance, and safety. Hardware/Software component interaction, customer service and networking concepts are discussed and reinforced with hands-on lab assignments. Students will gain confidence with the components of personal computer systems, learning proper procedures for hardware and software installations, upgrade and troubleshooting.

### **LEG121 LAW, SOCIETY, AND LEGAL REASONING**

*Credits: 3*

**Pre-requisite(s):** None

This course takes a multidisciplinary approach to the newly emerging field of law in society. It is designed as a general introduction to law from a social, economic, political and psychological viewpoint. The course will cover substantive legal topics that individuals encounter in personal and professional life experiences. The course also introduces students to legal analysis and reasoning.

### **LEG183 CONTRACTS**

*Credits: 2*

**Pre-requisite(s):** Nonw

This course is an introduction to sources of law affecting the formation, enforcing, and interpretation of contracts. The course includes the necessary elements of a contract,

the basic doctrines of contract law, and practical approaches to drafting a contract.

### **LEG184 LEGAL ETHICS**

*Credits: 3*

**Pre-requisite(s):** None

The course is an introduction to ethics for paralegals. The course covers ethical topics such as confidentiality, paralegal-attorney relationships, fee arrangements, attorney-client privilege, fiduciary responsibilities and public service. The course also covers a review of the Montana Rules of Professional Responsibility and the Model Code of Professional Responsibility.

### **LEG185 INTRODUCTION TO PARALEGAL STUDIES**

*Credits: 3*

**Pre-requisite(s):** None

Introduction to the paralegal career including ethical and professional standards. Overview of the American legal system, substantive areas of practice, legal analysis and investigation, law office administration and related terminology.

### **LEG186 INTRODUCTION TO LEGAL RESEARCH**

*Credits: 3*

**Pre-requisite(s):** None

This course is designed to prepare students to understand the basic concepts of the legal system and legal authorities. All available research sources will be explored as well as the interrelationship between sources. Students will apply their skills to develop a working knowledge of primary research sources, such as, state and federal statutes, law library resources, district, supreme and federal court systems, and secondary research sources.

### **LEG187 LEGAL RESEARCH AND WRITING I**

*Credits: 2*

**Pre-requisite(s):** A C- or higher in LEG186

This course provides an overview of advanced legal research focusing on how to find, use, understand, and correctly cite legal resources. Electronic research methods are presented. Application of legal research to writing is introduced. Students will examine Montana statutes and cases to illuminate course topics.

### **LEG188 PRINCIPLES OF REAL ESTATE**

*Credits: 2*

**Pre-requisite(s):** None

This course provides an overview of real estate law with a focus on the law in the State of Montana. Topics include the study of property law focusing on the nature and ownership of real property, title insurance, legal

descriptions, and the transnational aspects of financing methods involving trust indentures, mortgages, and contracts for deed with closing and recording procedures. This course will familiarize student with the issues and terminology central to modern real estate practice in a law office.

### **LEG189 CRIMINAL PROCEDURES**

*Credits: 3*

**Pre-requisite(s): None**

This course provides an overview of the law as it applies to criminal law procedures. Students will understand the nature of criminal law and the legal procedures within a law office such as arrest, search and seizure, post arrest procedures, evidence, interrogation and confessions, investigation and discovery, principles and accessories; trial procedures, sentencing and appeals.

### **LEG270 CIVIL LITIGATION**

*Credits: 3*

**Pre-requisite(s): None**

Introduction to rules governing civil litigation involving the general nature of how lawsuits arise including client interviews and data gathering, pleading and practice from the filing of suit to file preparation for trial, and core considerations of ethics and professionalism.

### **LEG272 COMPUTERS & LAW**

*Credits: 3*

**Pre-requisite(s): None**

This course provides students the knowledge to navigate the constantly changing technology used in the modern-day legal world. This course allows students to explore and develop a working knowledge of law software and technology, paperless office procedures, and the ethic and implications of using technology in a legal practice. Students will understand how to use technology correctly and justly.

### **LEG272 COMPUTERS & LAW**

*Credits: 3*

**Pre-requisite(s): None**

This course provides students the knowledge to navigate the constantly changing technology used in the modern-day legal world. This course allows students to explore and develop a working knowledge of law software and technology, paperless office procedures, and the ethic and implications of using technology in a legal practice. Students will understand how to use technology correctly and justly.

### **LIT110 INTRODUCTION TO LITERATURE**

*Credits: 3*

Instruction in critical analysis of imaginative literature - fiction, poetry, and drama. Emphasis on articulating strong responses to varied texts.

### **LIT211 AMERICAN LITERATURE II**

*Credits: 3*

**Pre-requisite(s): A "C-" or better in WRIT095 or satisfactory placement score. A "C-" or better in WRIT101 is recommended**

In this survey of texts representative of the American literary experience, in all its diverse forms, since 1865, students will explore the eclectic development of American letters and cultural identity.

### **LIT213 MONTANA LITERATURE**

*Credits: 3*

**Pre-requisite(s): A "C-" or better in WRIT095 or satisfactory score on placement test. A "C-" or better in WRIT101 is recommended**

The course will survey representative writings from modern-day Montana writers. Students will analyze a variety of prose, poetry and/or dramatic genres and appreciate the different styles, messages, and cultures presented in the works. Emphasis will be placed on themes particular to Montana and the West.

### **LIT224 BRITISH LITERATURE II**

*Credits: 3*

**Pre-requisite(s): A "C-" or higher in WRIT095 or satisfactory score on placement test. A "C-" or higher in WRIT101 is recommended**

In this survey of representative texts from Romanticism to postmodernism, students will explore a range of approaches to the development of British literature and cultural identity.

### **LIT227 INTRODUCTION TO SHAKESPEARE**

*Credits: 3*

**Pre-requisite(s): A "C-" or higher in WRIT095 or satisfactory score on placement test. A "C-" or higher in WRIT101 is recommended**

This course introduces students to the drama of Shakespeare. Students will use critical approaches to read and to analyze representative plays from the tragedies, comedies, histories, and romances.

### **LIT230 WORLD LITERATURE SURVEY**

*Credits: 3*

**Pre-requisite(s): A "C-" or higher in WRIT095 or satisfactory score on placement test. A "C-" or higher in WRIT101 is recommended**

World Literature is a survey course of poetry, drama, short stories, and novels in translation that focuses on critical interpretation of the works individually and collectively. Students will explore literary themes, structures, and critical strategies.

### **LIT234 INTRODUCTION TO EXISTENTIAL LITERATURE**

*Credits: 3*

**Pre-requisite(s): A "C-" or higher in WRIT095 or satisfactory score on placement test. A "C-" or higher in WRIT101 is recommended**

This course introduces students to various genres that portray existential themes in literature. Students will use critical approaches to read and analyze representative works ground in the philosophical movement. We will pursue questions of the significance of human existence and modernity by exploring the works of writers and thinkers associated with existentialism. Basic questions of human existence in modern literature will be explored in this course. Topics include anxiety and alienation; freedom and responsibility; authenticity and bad faith; individuality and mass society; rationality and the absurd; values and nihilism; and God and the meaninglessness.

### **LIT250 THE NOVEL**

*Credits: 3*

**Pre-requisite(s): A "C-" or higher in WRIT095 or satisfactory score on placement test. A "C-" or higher in WRIT101 is recommended**

The course introduces critical analysis of the novel, with an emphasis on articulating strong responses to varied texts.

### **LIT291 SPECIAL TOPICS**

*Credits: 3*

**Pre-requisite(s): A "C-" or higher in WRIT095 or satisfactory score on placement test. A "C-" or higher in WRIT101 is recommended**

This is an omnibus course, in which students will analyze and interpret selected literature, usually from a specific genre, period, or of a particular author or defined group of authors, depending on upon the specific course offering. Specific course offerings may be experimental, intended as one-time only, or intended as part of a catalog of offerings that may be offered or rotated on a periodic basis.

### **M005 CO-REQ SUPPORT FOR M105**

*Credits: 1*

**Pre-requisite(s): None**

**Co-requisite(s): M105**

This course is designed to accompany M105 Contemporary Math. It is intended to provide additional support in a lab setting. The content will mirror the course outcomes of M105 and background and necessary skills will be reviewed as needed. Topics include problem solving, financial math, mathematical modeling (linear and quadratic), and elementary statistics.

### **M092 ALGEBRA I**

*Credits: 2*

**Pre-requisite(s): None**

This course serves as an introduction to algebra, which includes the study of linear equations and inequalities, averages and interpretation, formulas, rules of exponents, scientific notation, sets, probability, graphs of linear equations, systems of linear equations and inequalities and quadratics.

### **M093 ALGEBRA II- STEM PREP**

*Credits: 3*

**Pre-requisite(s): A "C-" or higher in M092 or satisfactory score on placement test**

This course serves as an introduction to algebra, which includes the study of exponents, radical expressions and equations, complex numbers, polynomial operations, factoring, rational expressions and equations, absolute value equations and inequalities, solving and graphing quadratic equations and functions.

### **M105 CONTEMPORARY MATHEMATICS**

*Credits: 3*

**Pre-requisite(s): Placement in M093**

**Co-requisite(s): M005 if placement score indicates as such**

This course is designed to meet the general education mathematics requirement for the liberal arts major. It surveys some of the important ideas and practical applications in mathematics and uses algebra skills to solve real problems. Topics include problem solving, financial math, mathematical modeling (linear and quadratic), and elementary statistics.

### **M108T BUSINESS MATHEMATICS**

*Credits: 3*

**Pre-requisite(s): None**

Students in this course will examine the mathematics of business ownership and demonstrate an understanding of business decisions. Topics include ratios and percentages, algebraic equations, marketing, payroll, cash flow, simple and compound interest, insurance, financial statements, depreciation, annuities, and inventory valuation.

### **M111T TECHNICAL MATHEMATICS**

*Credits: 3*

**Pre-requisite(s): None**

The course includes fractions, decimals, ratios, proportions, formulas and word problems. Topics studied are estimations, metric and U.S. Customary systems, one-variable linear equations, ratios and percentages, developing applied skills for two- and three-dimensional figures, basic trigonometry principles, and plotting two-dimensional coordinates.

### **M115 PROBABILITY AND LINEAR MATHEMATICS**

*Credits: 3*

**Pre-requisite(s): A "C-" or higher in M092 or placement in M093**

This course is designed to meet the general education mathematics requirements for a variety of students such as accounting, business, and computer science students while setting a foundation for statistical reasoning. The course covers systems of linear equations and inequalities, matrix algebra, linear programming, and introduction to probability through models and probabilistic reasoning, finance, and logic.

### **M120T MATHEMATICS WITH HEALTH CARE APPLICATIONS**

*Credits: 3*

**Pre-requisite(s): None**

This course will examine the mathematics associated with the Allied Health field. Topics include arithmetic of rational numbers; the metric system; reading drug labels, medicine cups, syringes and intravenous fluid administration bags; apothecary measurement and conversion; dosage calculations; parenteral dosages; basic intravenous administration; basic dosage by weight units, equation solving, and interpretation of graphs. Not a general education core mathematics course.

### **M121 COLLEGE ALGEBRA**

*Credits: 3*

**Pre-requisite(s): A "C-" or higher in M093 or satisfactory score on placement test**

This course is the study of polynomial, rational, radical, exponential, and logarithmic equations, inequalities, functions, and related graphs; circular equations and graphs; and systems of linear and non-linear equations and inequalities.

### **M132 NUMBERS AND OPERATIONS FOR K-8 TEACHERS**

*Credits: 3*

**Pre-requisite(s): A "C-" or higher in M092 or placement in M093**

This course is the study of number and operations for prospective elementary and middle school teachers. Topics include all subsets of the real number system, arithmetic operations and algorithms, numeration systems, number theory, and problem solving.

### **M133 GEOMETRY AND GEOMETRIC MEASUREMENT FOR K-8 TEACHERS**

*Credits: 3*

**Pre-requisite(s): A "C-" or higher in M132**

The study of geometry and geometric measurement for prospective elementary and middle school teachers. Topics include symmetric, transformational, and coordinate geometry, Euclidean constructions, congruence and similarity, two-dimensional and three-dimensional measurements, and problem solving.

### **M140 COLLEGE MATH FOR HEALTHCARE**

*Credits: 3*

**Pre-requisite(s): A "C-" or higher in M093**

This course is designed to provide students with a solid mathematical foundation necessary to succeed in a health care profession. This course will review algebra, systems of measurement, ratio and proportions, basic probability and statistics concepts, and Ionic solutions and pH calculations. This course will apply mathematical reasoning and problem solving as it applies to the healthcare field.

### **M151 PRE-CALCULUS**

*Credits: 4*

**Pre-requisite(s): A "C-" or higher in M121 or satisfactory score on placement test**

This course is primarily for students who intend to take calculus. Topics include problem solving with two and three dimensional geometry, rational functions, exponential functions, logarithmic functions, trigonometric functions, law of sines, law of cosines, trigonometric identities and equations, vectors and polar coordinates, extended use of magnitude, circles, ellipses, hyperbolas, and sequences and series.



## **M171 CALCULUS I**

*Credits: 4*

**Pre-requisite(s):** A "C-" or higher in M151 or satisfactory score on placement test

The subject of this course is single variable calculus. Topics include functions, limits and continuity, differentiation, applications of the derivative, curve sketching, and integration theory.

## **M172 CALCULUS II**

*Credits: 4*

**Pre-requisite(s):** A "C-" or higher in M171

Topics include transcendental functions, methods of integration, applications of the integral, infinite series and sequences including Taylor's series, polar coordinates, and parametric equations.

## **M234 HIGHER MATHEMATICS FOR K-8 TEACHERS**

*Credits: 3*

**Pre-requisite(s):** A "C-" or higher in M093 or placement in M121 and M132

This course is the study of algebra, probability and statistics for prospective elementary and middle school teachers. Topics include algebraic representations, proportional reasoning, functions, statistical modeling and inference, and elementary probability theory.

## **M273 MULTIVARIABLE CALCULUS**

*Credits: 4*

**Pre-requisite(s):** A "C-" or higher in M172

Topics in two and three dimensional geometry. Manipulation and application of vectors. Functions of several variables, contour maps, graphs, partial derivatives, gradients, double and triple integration, vector fields, line integrals, surface integrals, Green's Theorem, Stokes' Theorem, the Divergence Theorem.

## **M274 INTRODUCTION TO DIFFERENTIAL EQUATIONS**

*Credits: 4*

**Pre-requisite(s):** A "C-" or higher in M172

An introduction to qualitative, quantitative, and numerical methods for ordinary differential equations. Topics include modeling via differential equations, linear and nonlinear first order differential equations and systems, elementary phase plane analysis, forced oscillations, and Laplace transform techniques.

## **MART145 WEB DESIGN**

*Credits: 3*

**Pre-requisite(s):** None

Students are introduced to planning and designing effective web pages using a text editor. Students will learn the basic elements of HyperText Markup Language (HTML5) and Cascading Style Sheets (CSS3).

## **MCH120 BLUEPRINT READING AND INTERPRETATION FOR THE MACHINIST**

*Credits: 2*

**Pre-requisite(s):** A "C-" or higher in MCH130

Blueprint reading covers orthographic projection, line identification, auxiliary and sectional views, dimensioning of drawings, common abbreviations, tolerancing, and sketching techniques.

## **MCH130 MACHINE SHOP**

*Credits: 3*

**Pre-requisite(s):** None

**Co-requisite(s):** M11T or M121 or higher

This course includes an emphasis on shop and work area safety. Instruction covers standard shop work, such as measurement, layout, basic hand tools, drills, drill presses, and taps and dies. Use of a pedestal grinder will also be covered. Work assignments incorporate projects requiring use of the above machines, tooling, and emphasize safety.

## **MCH132 INTRODUCTION TO ENGINE LATHES**

*Credits: 5*

**Pre-requisite(s):** None

This course covers tool bit grinding, facing, turning, boring, parting off, threading, tapering, knurling, trepanning, between center work, and use of faceplates and steady rests. Engine lathe safety will also be covered. The use and care of precision measuring tools will be covered.

## **MCH134 INTRODUCTION TO MILLS**

*Credits: 5*

**Pre-requisite(s):** A "C-" or higher in MCH130

This course covers all types of vertical and horizontal milling machines and use of all related mill accessories. Work assignments incorporate projects requiring use of these machines and tooling.

### **MCH136 ADVANCED LATHES**

*Credits: 5*

**Pre-requisite(s): A "C-" or higher in MCH132**

The Advanced Lathe course will use engine lathes to manufacture industrial parts. The use of assorted cutting tools and support tooling, such as form tools, carbide parts, taper attachments, follower, and steady rests. Close tolerance machining required. Actual customer projects will be incorporated into the coursework. Safety concepts and practices for manual machines will be reviewed.

### **MCH137 ADVANCED MILLS**

*Credits: 5*

**Pre-requisite(s): A "C-" or higher in MCH132**

The Advanced Mills course will utilize the horizontal and vertical mills in the lab. The use and care of rotary tables, indexing heads, end mills, slab mills, gear cutters, carbide cutters, criterion, and line boring will be covered. The various work holding methods, location methods, process planning and operations will be discussed. Safety theory and concepts for manual machines will be reviewed. Customer projects will be incorporated into the coursework.

### **MCH139 GRINDING APPLICATIONS**

*Credits: 2*

**Pre-requisite(s): A "C-" or higher in M111T, DDSN 135, MCH130, MCH132, MCH134**

This course covers set-up, use, and safety requirements of grinding machines. Hands-on use of machines will be emphasized.

### **MCH200 FUNDAMENTALS OF MACHINING**

*Credits: 3*

**Pre-requisite(s): None**

Students in this course will be introduced to machining principles and metal production systems used for the metals fabrication industry. Students will fabricate projects using the engine lathe, vertical milling machine, drill press, as well as other metal working, machinery and devices. Skills using micrometers, dial indicators, and dial calipers will be developed.

### **MCH230 TOOLING AND FIXTURES IN CNC**

*Credits: 2*

**Pre-requisite(s): None**

Tooling and fixtures used in CNC are discussed in a classroom environment. These topics, for both mill and lathe, will be discussed in order to facilitate the students' ability to select proper work holding devices and cutting tools for various types of machining operations that may be performed. Cutting tool information is one of the most multifaceted areas of study for developing machinists and

programmers. Both must be able to discern proper set-ups based on part and tool geometry while providing proper speed and feed data. The use of formulas and reference materials will be studied as a necessary facet of the manufacturing process.

### **MCH231 CNC TURNING OPERATIONS LEVEL 1**

*Credits: 4*

**Pre-requisite(s): A "C-" or higher in MCH136**

**Co-requisite(s): A "C-" or higher in MCH230**

This course is an introduction to CNC Turning Centers and the safe operation of common operating procedures, set-up and maintenance of the machine and control panel which will be discussed and implemented. The student will become acquainted with the ways in which various companies utilize CNC machine tools and personnel while learning methods for the installation of tools, establishing machine, fixture and part zero reference offsets. The students will also be introduced to the methods and reasons behind the modification of these reference offsets and other geometry offsets used to machine parts to demanding geometric tolerances.

### **MCH232 CNC TURNING PROGRAMMING OPERATIONS 2**

*Credits: 3*

**Pre-requisite(s): A "C-" or higher in MCH231**

This class introduces students to word address programming (G and M code) for CNC Turning Centers. The student will write formatted programs, set-up, and run their programs on the CNC Turning Center. Students will use basic and intermediate "G" codes with coordinates to create common part features such as contours, shoulders, bores, grooves, and chamfers. Students will learn to apply geometry offsets for machining their parts to exacting geometric tolerances. The goal will be to prepare, plan, then write safe, effective, and efficient CNC programs. Students will then use key concepts for part set-up, program verification, editing, and documentation.

### **MCH233 CNC TURNING PROGRAMMING OPERATIONS 3**

*Credits: 3*

**Pre-requisite(s): A "C-" or higher in MCH231 and MCH232**

This class enhances a student's ability to program, set-up, verify and operate CNC Turning Centers. The student will write well formatted CNC programs, utilizing strategic programming and logic techniques and CAD / CAM generated files, then set-up and run their programs on various CNC Turning Machines. Students will use "canned cycles" and intermediate level "G and M" codes to create common part features such as contours, grooves, bores, holes and threads, with an emphasis placed on Internal

Diameter (ID) operations. The goal will be to prepare, plan manufacturing process, then write safe, effective, and efficient CNC programs. Students will then use key concepts for part set-up, program verification, editing and documentation of process.

### **MCH234 CNC MILLING OPERATIONS LEVEL 1**

*Credits: 4*

**Pre-requisite(s): A "C-" or higher in MCH137**

**Co-requisite(s): MCH230**

This course is an introduction to CNC Milling Centers. The common operating procedures, set-up and maintenance of the machine and control panel will be discussed and implemented. The student will become acquainted with the ways in which various companies utilize CNC machine tools while learning methods for the installation of tools and establishing and utilizing fixture, tool and wear offsets. The students will also be introduced to the methods and reasons behind the modification of these reference offsets and other geometry offsets used to machine parts to demanding geometric tolerances.

### **MCH235 CNC MILLING PROGRAMMING OPERATIONS 2**

*Credits: 3*

**Pre-requisite(s): A "C-" or higher in MCH234**

This course is designed to challenge students in a team environment on more complex fabrication and repair job assignments. Students will systematically plan out, order material, and perform repair and fabrication work orders. They will select the proper welding procedures and processes for each job assignment. Although instructors will oversee the job, students are challenged to take on a leadership role with less supervision. In addition, students will be required to identify, maintain and organize all shop tools on a rotational basis.

### **MCH236 CNC MILLING PROGRAMMING OPERATIONS 3**

*Credits: 3*

**Pre-requisite(s): Completion of 1st year**

Common uses of the CNC Machining Center are discussed and implemented. Canned cycles for pocketing, hole manufacturing, threading, cutter compensation, and other standard controller features will be utilized. Students will learn to use loops, multiple work offset programming techniques, subroutines, and subprograms to shorten and simplify programs. All these programming approaches will be performed on 3 axis and 4 axis machining centers. Students will also learn advanced techniques for making programs run more efficiently.

### **MCH237 CAD/CAM CNC TURNING CENTER**

*Credits: 5*

**Pre-requisite(s): Completion of 1st year**

**Co-requisite(s): MCH233**

This class introduces students to Mastercam X for Lathe / Turning application. Students will learn to navigate the programs' GUI interface for the purpose of: 1) Creating part geometry as CAD entities; 2) Defining cutting tools and machining operations; 3) Generating CAM type tool paths; 4) Graphically render their machining operations for verification purposes; and 5) Post process their work. Students will then have the opportunity to load their programs into a CNC Turning Center and perform all necessary tasks to complete the manufacturing process for their piece part. This class will walk a student through the entire creative process of part design, mfg. process development and machining a finished product

### **MCH238 CAD/CAM CNC MACHINING CENTER**

*Credits: 5*

**Pre-requisite(s): Completion of 1st year**

**Co-requisite(s): MCH236**

This class introduces students to Mastercam X for CNC Milling application. Students will learn to navigate the programs' GUI interface for the purpose of: 1) Creating part geometry as CAD entities; 2) Defining cutting tools and machining operations; 3) Generating CAM type tool paths; 4) Graphically render their machining operations for verification purposes; and 5) Post processing their work. Students will then have the opportunity to load their programs into a CNC Milling Center and perform all necessary tasks to complete the manufacturing process for their piece part. This class will walk a student through the entire creative process of part design, mfg. process development and machining a finished product.

### **MCH240 METALLURGY**

*Credits: 2*

**Pre-requisite(s): A "C-" or higher in DDSN 135, MCH130, MCH132, MCH134 and M111T**

The student will learn about types of ferrous and nonferrous metals and their applications. Metal numbering systems and the types of heat-treating will also be covered.

### **MCH245 SHOP PRACTICES**

*Credits: 2*

**Pre-requisite(s): A "C-" or higher in MCH120, MCH130, MCH132, and MCH134**

This is an on-going semester course during normally scheduled shop hours. It is intended to match spring semester students with live, practical shop experiences involving subject matter previously covered in other courses. Emphasis will be on productivity.

### **MCH279 COMPUTER AIDED MANUFACTURING - METALS**

*Credits: 3*

**Pre-requisite(s): A "C-" or higher in MCH200**

This course covers the use of CAD/CAM/CNC machining to manufacture various metal products. Both Computer Numerical Control (CNC) of lathes and mills will be taught. Students will have opportunities to machine a wide variety of materials and gain other practice in Cad/Cam operations.

### **MECH205 SMALL ENGINES**

*Credits: 2*

**Pre-requisite(s): None**

This course concentrates on small gasoline engines as used in the Outdoor Power Equipment industry (less than 20 horse power). Emphasis will be on the four major theories of small engines-compression, ignition, carburetion, and governing. Students will completely disassemble, familiarize, inspect, reassemble and operate a school owned small engine.

### **MUSI101 ENJOYMENT OF MUSIC**

*Credits: 3*

**Pre-requisite(s): None**

This course traces the development of art music through the past 1000 years. Vocal and instrumental music and composers from the Middle Ages, Renaissance, Baroque, Classical, Romantic, and 20th century will be examined through listening, reading, and writing. Students will be presented with the analytical and comparative tools to identify and understand the various historical musical eras.

### **MUSI203 AMERICAN POPULAR MUSIC**

*Credits: 3*

**Pre-requisite(s): None**

This course is intended to help students think creatively and critically about popular music. We will study significant styles of diverse American music beginning with the roots and continuing through the present day. We will explore several recurring themes throughout the course: (1) The interaction of European American, African American, and Latin American traditions, (2) The influence of mass media and technology (printing, recording, radio, video and internet), (3) The role of popular music as a symbol of identity (race, class, gender and generation).

### **NASX105 INTRODUCTION TO NATIVE AMERICAN STUDIES**

*Credits: 3*

**Pre-requisite(s): None**

This course is a study of cultural makeup of the Native Americans in Montana and subsequently in the United States. Education, historical, legal, and social aspects will be analyzed for their influence on the modern Indian culture.

### **NRSG130 FUNDAMENTALS OF NURSING**

*Credits: 3*

**Pre-requisite(s): None**

This course introduces learners to knowledge, basic clinical skills and attitudes essential for the nursing role. The course approach presents concepts and behaviors of nursing roles within the context of the nursing process and multicultural, holistic healthcare. Emphasis is on theoretical and practical concepts of nursing skills required to meet the needs of patients in a variety of settings.

### **NRSG131 FUNDAMENTALS OF NURSING LAB**

*Credits: 3*

**Pre-requisite(s): None**

This lab is an integration of clinical skills performance using healthcare scenarios which focus on implementation of the nursing process, clinical decision making, and caring interventions in collaboration with the interdisciplinary team in a variety of healthcare settings. 1 credit of lab will be given for the CNA certification through PLA and 2 credits will be completed through coursework.

### **NRSG135 PHARMACOLOGY FOR PRACTICAL NURSES**

*Credits: 3*

**Pre-requisite(s): None**

This course introduces the student to the knowledge needed to provide safe nursing care to clients across the life span in the administration of medications. Content covered includes the basic pathophysiology of common disease processes, as well as the basic principles of pharmacology such as pharmacokinetics, pharmacodynamics, medication interactions, and potential adverse medication reactions. The emphasis is on patient-centered care utilizing the nursing process and incorporating evidence based practice.

### **NRS136 PHARMACOLOGY FOR PRACTICAL NURSES LAB**

*Credits: 1*

**Pre-requisite(s): None**

This lab integrates the knowledge of safe medication administration into a laboratory environment. This includes dosage calculation, and safe administration of medications through a variety of appropriate routes, including intravenous therapy.

### **NRS140 ADULT HEALTH NURSING**

*Credits: 4*

**Pre-requisite(s): None**

The course is designed to build upon the knowledge acquired in Fundamentals of Nursing. The focus is on safe, effective care environments, health promotion and maintenance, and psychosocial and physiological integrity of adults who are experiencing health interruptions in well-defined practice settings. Principles of pharmacology, cultural competency, gerontology, nutrition, end-of-life and palliative care are integrated throughout the course.

### **NRS141 ADULT HEALTH NURSING CLINICAL**

*Credits: 2*

**Pre-requisite(s): None**

This clinical is an integration of experiences in well-defined practice settings. The focus is on implementation of the nursing process, professional behaviors, communication, clinical decision making, caring interventions and collaboration in interdisciplinary practice to prevent, promote, maintain and restore basic health.

### **NRS142 NURSING CARE OF WOMEN AND CHILDREN**

*Credits: 3*

**Pre-requisite(s): None**

This course introduces the student to the knowledge needed to provide safe nursing care for the female patient and family with regards to reproductive issues, including perinatal. Also included is the child patient and family with regards to normal growth and development as well as common and chronic disease processes. Psychosocial aspects of care, legal and ethical issues, and cultural beliefs will be incorporated throughout. The emphasis is on patient and family-centered care utilizing evidence based practice, and effective interpersonal communication skills while functioning within an interdisciplinary team environment.

### **NRS143 NURSING CARE OF WOMEN AND CHILDREN CLINICAL**

*Credits: 1*

**Pre-requisite(s): None**

This clinical integrates the knowledge of care for women, children, and families in a variety of clinical settings.

### **NRS148 LEADERSHIP ISSUES FOR PRACTICAL NURSES**

*Credits: 2*

**Pre-requisite(s): None**

This course explores the legal and ethical principles of Practical Nursing leadership in providing safe, relationship-centered care. The concepts of accountability, fiscal responsibility in relation to patient outcomes, collaboration, effective communication, conflict management skills, critical thinking, delegation, principles of human caring, and prioritization are emphasized throughout the course. Application of concepts in the rural environment are included.

### **NRS149 LEADERSHIP ISSUES FOR PRACTICAL NURSES CLINICAL**

*Credits: 1*

**Pre-requisite(s): None**

This clinical integrates theory with implementation of basic leadership skills. Preceptor experiences are based on selected nursing needs in the local and rural communities with a focus on knowledge, skills, and attitudes of nursing leadership needed to provide high quality, holistic, safe nursing care.

### **NRS152 GERONTOLOGY AND COMMUNITY NURSING**

*Credits: 2*

**Pre-requisite(s): None**

This course presents the knowledge, skills, and attitudes needed to provide high quality holistic nursing care for the geriatric client, as well as other vulnerable populations in the local and rural communities. The safe application of the nursing process in community based, patient-centered, interdisciplinary care environments is emphasized in order to promote patients well-being in regards to common acute and chronic health issues, including end-of-life and palliative care.

### **NRSG153 GERONTOLOGY AND COMMUNITY NURSING CLINICAL**

*Credits: 2*

**Pre-requisite(s): None**

This clinical integrates theory into the clinical setting. The emphasis is on promoting the highest level of health and wellness for common acute and chronic health issues for the geriatric and other vulnerable populations in local and rural communities.

### **NRSG220 FOUNDATIONS OF ETHICAL NURSING**

*Credits: 3*

**Pre-requisite(s): Admission to the nursing program**

Drawing on contemporary issues in bioethics this foundational course explores influential moral values, philosophical principles and theories as formal grounding for ethical decision making and action in health care. A broad historical, cultural and societal perspective is emphasized to provide the background for understanding the everyday ethical problems that health professionals encounter in their practices. A psychological and social framework of analysis is used to foster sensitivity, skills of analysis and ethical behavior in situations of moral conflict.

### **NRSG230 NURSING PHARMACOLOGY**

*Credits: 3*

**Pre-requisite(s): None**

This course provides the student with an overview of pharmacology with an emphasis of the study of effects, interactions, and nursing considerations of pharmacologic agents on the client population across the lifespan. The course also explores the ethical, legal, cultural and age implications of pharmacologic therapy across diverse populations and the lifespan.

### **NRSG231 NURSING PHARMACOLOGY LAB**

*Credits: 2*

**Pre-requisite(s): None**

An integration of lab experiences focusing on the basic principles in providing safe medication administration, including intravenous therapy across diverse populations and the lifespan.

### **NRSG232 FOUNDATIONS OF NURSING**

*Credits: 3*

**Pre-requisite(s): None**

This course provides opportunities to develop competencies necessary to meet the needs of individuals throughout the lifespan in a safe, legal, and ethical manner using the nursing process. Students learn concepts and skills necessary for maintaining standard precautions, physical, psychological and nutritional safety, along with

skills needed in therapeutic interventions. Students are introduced to the concepts of professional nursing, patient needs, safety, communication, teaching/learning, critical thinking, ethical-legal, rural nursing, cultural and ethnic diversity, and interdisciplinary patient-centered care.

### **NRSG233 FOUNDATIONS OF NURSING LAB**

*Credits: 3*

**Pre-requisite(s): None**

An integration of lab experiences focusing on psychomotor nursing skills needed to assist individuals in meeting basic human needs. Application of the nursing process and hands-on learning experiences for nursing skills, patient assessments, nutritional safety, and basic therapeutic skills are practiced and demonstrated.

### **NRSG234 ADULT NURSING I**

*Credits: 3*

**Pre-requisite(s): None**

This course builds upon the knowledge and skills acquired in Foundations of Nursing, and places them in the context of patient-centered care. Social, cultural, ethical, rural and legal issues, end-of-life and palliative care across diverse adult populations are introduced. Health promotion and prevention throughout the adult lifespan, with specific focus on the geriatric patient, is emphasized. Normal aging, health alterations associated with aging, and their implications are addressed.

### **NRSG235 ADULT NURSING I CLINICAL**

*Credits: 2*

**Pre-requisite(s): None**

This clinical introduces the student to nursing practice in care of the stable adult patient. This includes care of the adult in a variety of health care settings. Students utilize the nursing process to develop individualized plans of care to prevent illness, promote wellness and maintain or restore health based on patient needs and evidence based practice.

### **NRSG236 HEALTH AND ILLNESS OF MATERNAL NURSING**

*Credits: 2*

**Pre-requisite(s): None**

In this course, the student applies holistic concepts to the professional nursing care of the childbearing family including conception, prenatal, intrapartum, postpartum and newborn care. Content addresses health and complex alterations, reproduction and menopause, nutrition, therapeutic communication, ethical, legal, cultural and evidenced-based practice.

### **NRS237 HEALTH AND ILLNESS OF MATERNAL NURSING CLINICAL**

*Credits: 1*

**Pre-requisite(s): None**

This clinical introduces the student to the role of the registered nurse in the care of the childbearing family. Students will utilize the nursing process to assess and develop individualized plans of care for mother and infant. Emphasis will be placed on patient education to promote healthy mother infant and childbearing family bonding.

### **NRS244 ADULT NURSING II**

*Credits: 3*

**Pre-requisite(s): None**

This course builds upon previous knowledge of the nursing process and care of the patient experiencing acute and chronic disease alterations. Pathophysiologic processes are discussed as related to evidence-based nursing interventions. Students apply the nursing process, nutritional therapy, and pharmacological therapy utilizing interdisciplinary practice to promote, maintain, and restore health across the adult lifespan.

### **NRS245 ADULT NURSING II CLINICAL**

*Credits: 2*

**Pre-requisite(s): None**

In this clinical experience the student will provide care for individuals and families experiencing acute health alterations, and those associated with chronic disease processes. Students use the nursing process to systematically analyze information to plan and implement nursing interventions which are individualized and founded on evidence-based practice

### **NRS246 HEALTH AND ILLNESS OF CHILD AND FAMILY NURSING**

*Credits: 2*

**Pre-requisite(s): None**

In this course, the student applies holistic concepts to the professional nursing care of children and their families in health, illness, end-of-life and palliative care. Emphasis is placed on incorporating growth and developmental principles to facilitate positive health outcomes through health promotion, nutrition and disease prevention.

### **NRS247 HEALTH AND ILLNESS OF CHILD AND FAMILY NURSING CLINICAL**

*Credits: 1*

**Pre-requisite(s): None**

In this clinical, students will utilize the nursing process, to provide nursing care of healthy and high-risk pediatric populations and their families experiencing disruptions in bio/psycho/social/cultural and spiritual needs. Emphasis is

also placed on health promotion, health maintenance, and therapeutic communication.

### **NRS254 MENTAL HEALTH CONCEPTS**

*Credits: 3*

**Pre-requisite(s): None**

In this course, the student focuses on the nursing concepts utilizing basic human needs, developmental theory, nursing process, therapeutic communication, and nursing interventions to promote and maintain health for clients and families experiencing mental-health issues. The student will examine client responses to stressors across the life span. Tasks of biological-behavioral concepts in psychosocial nursing care, rural and cultural impacts will be addressed.

### **NRS255 MENTAL HEALTH CONCEPTS CLINICAL**

*Credits: 1*

**Pre-requisite(s): None**

This clinical applies the knowledge of psychiatric and mental health nursing. Students will have mental health focused clinical experiences in a variety of settings.

### **NRS256 PATHOPHYSIOLOGY**

*Credits: 3*

**Pre-requisite(s): None**

This course introduces the student to the basic principles and processes of pathophysiology including cellular communication, genes and genetic disease, forms of cellular injury, nutrition, fluid and electrolyte/acid base balance, immunity, stress coping and illness, and tumor biology. Pathophysiology of the most common alterations according to body systems will be discussed as well as the latest developments in research and patient-centered nursing interventions.

### **NRS259 ADULT NURSING III**

*Credits: 3*

**Pre-requisite(s): None**

This course expands on the nursing role in care of patients with complex health alterations. Students utilize evidence-based, interdisciplinary interventions to meet patient and family needs.

### **NRS260 ADULT NURSING III LAB**

*Credits: 1*

**Pre-requisite(s): None**

In this lab students are introduced to basic electrocardiogram interpretation, advanced concepts of perfusion, ventilation and complex pharmacologic regimens.

### **NRSG261 ADULT NURSING III CLINICAL**

*Credits: 2*

**Pre-requisite(s): None**

This clinical experience focuses on application of the nursing process and utilization of information to provide comprehensive nursing care to the acutely ill patient experiencing complex health alterations in a variety of settings. Emphasis is placed on prioritization of care and collaboration with other members of the interdisciplinary team to ensure optimal client care.

### **NRSG266 MANAGING CLIENT CARE FOR THE RN**

*Credits: 2*

**Pre-requisite(s): None**

In this course students examine concepts of leadership and management emphasizing prioritization, delegation, and supervision of nursing care for patients across the lifespan. Topics also include communication techniques, legal and ethical issues, care of the culturally diverse patient, and utilizing change theory. Healthcare policy, finance, and regulatory environment issues are explored and applied to planning, collaborating and coordinating care across the continuum.

### **NRSG267 MANAGING CLIENT CARE FOR THE RN CLINICAL**

*Credits: 2*

**Pre-requisite(s): None**

This precepted clinical experience focuses on principles of nursing leadership and management in a variety of settings. Students apply knowledge to provide culturally competent, holistic interventions within the professional nursing role for individuals, communities, and families across the lifespan.

### **NTS104 CCNA 1: INTRODUCTION TO NETWORKS**

*Credits: 4*

**Pre-requisite(s): None**

This course is a fundamentals class based on the CISCO Network Academy curriculum. It is the first in a four-course series. This class covers: Network terminology, the OSI Network model, standards for network topologies and network wiring, IP addressing, subnet masks, network administration, and network planning. An introduction to the concept of network routers and their role in networking will be discussed. These basic principles are reinforced with hands-on lab work.

### **NTS105 CCNA 2: ROUTING AND SWITCHING ESSENTIALS**

*Credits: 3*

**Pre-requisite(s): A "C-" or higher in NTS104**

Routing and Switching Essentials, second in the four course Cisco Routing and Switching series, builds on skills and IOS command knowledge learned in NTS-104. The course covers: Router and switch theory, device configuration and troubleshooting. Routing protocols: RIP1 & 2 and OSPF versions 2 & 3. Switch port security, VLANs, trunking and interVlan routing. Network Address Translation and Access Control lists, complete this rigorous course. Both live equipment and simulation lab models reinforce lecture concepts. At course completion, students are prepared for the CCENT certification exam.

### **NTS204 CCNA 3: SCALING NETWORKS**

*Credits: 3*

**Pre-requisite(s): A "C-" or higher in NTS105**

LAN switching and wireless technologies are the focus of the third course in the CISCO curriculum leading to CCNA certification. The course explores the roll of switches in the modern networking environment, the Cisco IOS command-line interface used in switch configuration, VLANs, spanning-tree protocol, VLAN trunking protocols and security. Wireless technologies are introduced as well as the placement of Routers within a switched network. Students will build on and apply information from ITS-150 and ITS-152. Material is presented with lecture and hands-on activities, using live and simulation work. Distance learning technologies allow students the freedom to learn - by - doing in the lab and from home via internet connection with simple software. Our extensive equipment inventory and the current configuration allow the student to practice network device configuration and troubleshooting much as they would in a "real world" environment.

### **NTS205 CCNA 4: CONNECTING NETWORKS**

*Credits: 3*

**Pre-requisite(s): A "C-" or higher in NTS105**

Connecting Networks, fourth in the Cisco Routing and Switching series, leads to the Cisco Certified Networking Associate (CCNA) exam and beyond. The curriculum focuses on Network design with advanced network management projects. Topics covered include Wide Area Networking (WAN) setup and design, Point to Point Protocol (PPP) with security, Frame Relay and limited Voice over IP (VOIP). This course builds upon the previous classes and expands knowledge of IP addressing, wildcard masks and security. In addition the course explores Dynamic Host addressing (DHCP), Virtual Networks (VPN) and Tunneling. Network Address



Translation (NAT) and Port Address Translation (PAT) concepts are expanded with advanced hands-on activities. Security applications such as Syslog, SNMP and NetFlow are discussed and explored. IP phones, Switch and Router POE interfaces are combined to enlarge the student knowledge base preparing for both CCNA certification testing and workplace application.

### **PHL110 PROBLEMS OF GOOD AND EVIL**

*Credits: 3*

#### **Pre-requisite(s): None**

This course includes an analysis of basic moral concepts and a survey of the ways in which these concepts operate in contexts. Applications are made to contemporary moral issues one might encounter in the work world or the student's field of study.

### **PHL215 INTRODUCTION TO CONSCIOUSNESS STUDIES**

*Credits: 3*

#### **Pre-requisite(s): A "C-" or higher PSYX100**

Students will learn about the basic issues in consciousness studies. These issues include the "problem" of consciousness, philosophical views, neurological models, and other issues in pertinent fields.

### **PHL233 INTRODUCTION TO DEDUCTIVE LOGIC**

*Credits: 3*

#### **Pre-requisite(s): Placement into M105 or higher**

This course is an introductory course, so no experience with formal logic is required. Provides an introduction to argumentation and symbolic logic, including a variety of analytical tools for evaluating arguments. Students translate English statements into symbolic form, then subject those statements (and the arguments constructed from those statements) to different levels of analysis. May benefit students interested in linguistics, philosophy, computer science, math, or anyone curious about how sound arguments are constructed.

### **PHSX205 COLLEGE PHYSICS I**

*Credits: 4*

#### **Pre-requisite(s): A "C-" or higher in M151, or placement into M171**

This is the first semester of a two semester series of college physics. Topics covered include kinematics, Newton's Laws of Motion and Gravitation, energy, momentum, rotational motion, oscillations, basic properties of fluids, wave motion, and thermodynamics. The lab component complements lecture material.

### **PHSX207 COLLEGE PHYSICS II**

*Credits: 4*

#### **Pre-requisite(s): A "C-" or higher in PHSX205 and M151**

This is the second semester of a two semester series of college physics. Topics covered include electrostatics, DC circuits, optics, and introduction to modern physics. Includes a lab component that complements lecture material.

### **PHSX220 PHYSICS I (W/ CALCULUS)**

*Credits: 4*

#### **Pre-requisite(s): A "C-" or higher in M171**

First semester of a three-semester sequence primarily for STEM students. Covers topics in mechanics (such as motion, Newton's laws, conservation laws, work, energy, systems of particles, and rotational motion) and in mechanical waves (such as oscillations, wave motion, sound, and superposition).

### **PHSX222 PHYSICS II (W/ CALCULUS)**

*Credits: 4*

#### **Pre-requisite(s): A "C-" or higher in PHSX 220 and M 172**

#### **Co-requisite(s): None**

Second-semester of a three-semester sequence primarily for STEM students. Covers topics in electricity and magnetism (such as Coulomb's law, Gauss' law, electric fields, electric potential, dc circuits, magnetic fields, Faraday's law, ac circuits, and Maxwell's equations) and optics (such as light, geometrical optics, and physical optics).

### **PHSX226 GENERAL SCIENCE: INTEGRATED PHYSICAL SCIENCE I**

*Credits: 4*

#### **Pre-requisite(s): A "C-" or higher in M093**

#### **Co-requisite(s): None**

An investigation of basic principles of physics and chemistry including matter, physical and chemical properties, energy, motion, light, atomic structure, bonding, solutions and chemical reactions. The interdependence of chemistry and physics will be emphasized. This course is intended for non-science majors including elementary education.

### **PSCI210 INTRODUCTION TO AMERICAN GOVERNMENT**

*Credits: 3*

#### **Pre-requisite(s): None**

This course explores the nature, purpose, and forms of the America government; the relationship between function and structure; the dynamics of political change; and the governmental problems of modern society. Emphasis will be placed on constitutional principles, political processes,

public opinion, interest groups, political parties, elections, congress, the Presidency, and the Courts.

### **PSCI260 STATE AND LOCAL GOVERNMENT**

*Credits: 3*

**Pre-requisite(s): A "C-" or higher WRIT101**

The course focuses on the authorities, structure, and functions of state and local governments. Emphasis is given to how state and local governments fit into the American system of federalism and how the relationships between the national government, state governments and local governments have evolved over time based upon shifting demands for increased or decreased centralization of policy-making.

### **PSYX100 INTRODUCTION TO PSYCHOLOGY**

*Credits: 3*

**Pre-requisite(s): Placement into WRIT101 or WRIT11 taken concurrently**

This course is an introduction to the scientific study of behavior in humans and other animals, including the biological bases of behavior, learning and memory, cognition, motivation, developmental and social processes, psychological disorders, and their treatment.

### **PSYX120 RESEARCH METHODS I**

*Credits: 3*

**Pre-requisite(s): None**

This course examines the experimental and quantitative methods employed in the scientific study of behavior. It is an introduction to the design and analysis of psychological research. Topics include the logic and philosophy of psychological research, conceptualizing research questions, hypothesis testing, data collection, and analysis strategies used by researchers in psychology. It is also an introduction to using statistical data analysis.

### **PSYX230 DEVELOPMENTAL PSYCHOLOGY**

*Credits: 3*

**Pre-requisite(s): A "C-" or higher in PSYX100 or consent of instructor**

Developmental Psychology is a comprehensive study of development across the lifespan including physical structure, thought, and behavior of a person as a result of both biological and environmental influences. It provides an up-to-date presentation of key topics, issues, and controversies in the field of lifespan development.

### **PSYX233 FUNDAMENTALS OF PSYCHOLOGY OF AGING**

*Credits: 3*

**Pre-requisite(s): A "C-" or higher in PSYX100**

The Fundamentals of Psychology of Aging examines the theories and research findings of the psychology of adulthood and the elderly. Applications of theory and knowledge are utilized to enhance course material.

### **PSYX240 FUNDAMENTALS OF ABNORMAL PSYCHOLOGY**

*Credits: 3*

**Pre-requisite(s): A "C-" or higher in PSYX100 or consent of instructor**

This course will explore psychopathology, the major psychiatric syndromes, the different theoretical perspectives, treatment, and therapy.

### **PSYX250 FUNDAMENTALS OF BIOLOGICAL PSYCHOLOGY**

*Credits: 3*

**Pre-requisite(s): A "C-" or higher PSYX100**

This course is an introduction to the relationships between neurological structures and mechanisms and their corresponding psychological cognitive processes. Origins and adaptations of structures and behaviors as well as the methods used to study these relationships are also reviewed. Clinical applications of course material are examined.

### **PSYX260 FUNDAMENTALS OF SOCIAL PSYCHOLOGY**

*Credits: 3*

**Pre-requisite(s): A "C-" or higher in PSYX100 or SOCI101 or consent of instructor**

This course serves as an exploration of the scientific study of how people think about one another, influence one another and related to one another. It emphasizes the situation, the person, and personal reactions to situations, as well as the application of social psychological principles to different societies and cultures.

### **PSYX270 FUNDAMENTALS OF LEARNING**

*Credits: 3*

**Pre-requisite(s): A "C-" or higher in PSYX100 or consent of instructor**

This course is an introduction to scientific principles, theories, and applications of learning, including but not limited to respondent and operant conditioning, social learning, and verbal learning. The research base of learning is also covered.

### **PSYX280 FUNDAMENTALS OF COGNITION AND MEMORY**

*Credits: 3*

**Pre-requisite(s): A "C-" or higher in PSYX100**

This course serves as an introduction to the scientific study of cognition. The course will provide an introduction and history of cognitive psychology and the basic concepts of attention, perception, memory, decision making, categorization, reasoning, and language acquisition.

### **PSYX292 INDEPENDENT STUDY: PSYCHOLOGY**

*Credits: 1*

**Pre-requisite(s): Consent of Faculty Sponsor**

This course is designed to meet specific learning needs of students in psychology. Typically, such independent study projects focus on learning opportunities not otherwise offered at Helena College. Students initiate a proposal which includes the number of hours to be spent on the project, outcomes, and evaluation procedures. The proposal will be approved by the student, Faculty Sponsor, Division Director, and Executive Director of Enrollment office.

### **PSYX298 INTERNSHIP: PSYCHOLOGY**

*Credits: 3*

**Pre-requisite(s): A "B" or higher in PSYX240**

This course is designed for the student who takes the initiative to develop professional skills outside of and in addition to normal curriculum. Internships generally will be coordinated with a mental health care facility or other psychology related facility. Students may use internships as a highly rewarding experience that aids the student's transition from school to work. The student initiates the proposal and develops how many hours to be spent in the internship, specific outcomes, and how evaluation is to be accomplished.

### **PSYX299 CAPSTONE: PSYCHOLOGY**

*Credits: 3*

**Pre-requisite(s): Consent of Faculty Sponsor**

This capstone course is designed to assist students integrate prior knowledge gained in the psychology curriculum. The course is a self-directed, integrated, and applied learning opportunity where students can demonstrate acquired knowledge. Capstone projects must be approved by instructor and must show a broad mastery of the academic and application aspects of the field of psychology. Student will generate a proposal outlining the nature of the capstone, the number of hours to be spent on the project, and the evaluation procedures. The proposal must be approved by the Faculty Sponsor.

### **SOCI101 INTRODUCTION TO SOCIOLOGY**

*Credits: 3*

**Pre-requisite(s): None**

This course is an introduction to basic sociological concepts and principles, emphasizing human social organization and how groups influence behavior.

### **SOCI160 SOCIOLOGY OF MEDIA AND POPULAR CULTURE**

*Credits: 3*

**Pre-requisite(s): None**

This course examines the social significance of media and popular culture within the United States with particular emphasis on the sociohistorical development of media industries, the complex relationships between consumption and production, and how various media landscapes shape our understandings of gender, race, class, and sexuality. Case studies ranging from Barbie to Beyoncé, Warhol to Walmart, and media forms such as film, television, music, social media, video games, and virtual reality will be examined. Students will develop critical media literacy and viewership practices as they implement various sociological perspectives to analyze how mass media and popular culture both impacts and is impacted by individuals.

### **SOCI201 SOCIAL PROBLEMS**

*Credits: 3*

**Pre-requisite(s): None**

An introduction to sociological perspectives regarding society's problems, this course examines the causes of major current and historical social problems, as well as the role of social research in identifying and solving problems.

### **SOCI211 INTRODUCTION TO CRIMINOLOGY**

*Credits: 3*

**Pre-requisite(s): A "C-" or higher in SOCI101 or PSYX100**

This course will introduce students to the different sociological, psychological, and biological theories that have been used to explain criminal behavior. The course will examine the field from an historical perspective and contemporary focusing on the different ways in which criminal behavior has been explained and the various ways criminologists go about studying criminal behavior

### **SOCI220 RACE, GENDER, AND CLASS**

*Credits: 3*

**Pre-requisite(s): A "C-" or higher PSYX100 or SOCI101**

This course examines the intersecting structure and dynamics of race, gender and class with a focus on power relationships, intergroup conflict and minority-group status. Using a variety of sociological perspectives, this course looks at these relationship dynamics in the United

States and around the world. Emphasis is placed on historical and comparative analysis, distribution of power, conflict and reconciliation, and social change.

### **SOCI225 SEX AND SEXUALITIES**

*Credits: 3*

**Pre-requisite(s): A "C-" or higher in SOCI101**

This course debunks the notion that sex and sexuality are natural and unchanging categories and instead examines how these categories are historically and socially constructed. Over the semester students will interrogate how the West has used sex and sexuality as vehicles in the production of what constitutes normal, permissible, and deviant identities/behaviors through primarily, but not exclusively, a Sociological Queer Studies framework. The study of sex and sexuality intersects with broader sociological questions about power, culture, social interaction, inequality, social movements, and public policy thus some of the topics addressed include: the politics of sexuality and sexual identities; forms of oppression including heterosexism, homophobia, and transphobia; queer activism; the pornography of everyday life; and the medicalization of sex and sexuality. Particular emphasis will be given to the diversity of sexuality and its intersections with race, gender, class, disability, and nation.

### **SOCI234 SOCIOLOGY OF SEX AND SEXUALITIES**

*Credits: 3*

**Pre-requisite(s): None**

This course debunks the notion that sex and sexuality are natural and unchanging categories and instead examines how these categories are historically and socially constructed. Over the semester students will interrogate how the West has used sex and sexuality as vehicles in the production of what constitutes normal, permissible, and deviant identities/behaviors through primarily, but not exclusively, a Sociological Queer Studies framework. The study of sex and sexuality intersects with broader sociological questions about power, culture, social interaction, inequality, social movements, and public policy thus some of the topics addressed include: the politics of sexuality and sexual identities; forms of oppression including heterosexism, homophobia, and transphobia; queer activism; the pornography of everyday life; and the medicalization of sex and sexuality. Particular emphasis will be given to the diversity of sexuality and its intersections with race, gender, class, disability, and nation.

### **SOCI235 AGING AND SOCIETY**

*Credits: 3*

**Pre-requisite(s): A "C-" or higher in SOCI101**

This course focuses on the demographic, social, and cultural effects of aging in society. Students will examine how the aging population will affect and be affected by such factors as government, health care, and the economy. Emphasis is placed upon aging in the United States.

### **SPNS101 ELEMENTARY SPANISH**

*Credits: 4*

**Pre-requisite(s): None**

This introductory course prepares students for basic communication in Spanish and presents fundamentals of the language holistically through listening, speaking, reading, and writing. The course also explores cultural information.

### **SPNS102 ELEMENTARY SPANISH II**

*Credits: 4*

**Pre-requisite(s): A "C-" or higher in SPNS101**

This course continues and builds upon the fundamentals of the Spanish language, and prepares students for more in-depth communication through listening, speaking, reading, and writing. Cultural information is also included.

### **STAT216 INTRODUCTION TO STATISTICS**

*Credits: 3*

**Pre-requisite(s): A "C-" or higher in M105, M115, M121, M140, or higher or satisfactory score on placement test**

This course teaches a basic introduction to the fundamental concepts and methods of statistics. Topics include: frequency distributions, measures of central tendency, measures of dispersion, fundamentals of probability, binomial distribution, estimation, confidence intervals and hypothesis testing for normal distributions, correlation and simple linear regression.

### **SW100 INTRODUCTION TO SOCIAL WELFARE**

*Credits: 3*

**Pre-requisite(s): None**

This course presents an introductory overview of human services, educating students about programs and problems in meeting social welfare needs. Emphasis is on the complexity of social services along with their historical development. The analysis of the values, attitudes, economic and political factors that affect the provision of social services are addressed. Potential solutions to social problems are also examined.

## **SW200 INTRODUCTION TO SOCIAL WORK PRACTICE**

*Credits: 4*

**Pre-requisite(s): A "C-" or higher SW100**

This course is designed to prepare students for direct social work practice. This course provides an introduction to social work as a profession. Content includes an examination of goals, guiding philosophy and basic assumptions of social work practice. Emphasis is on the generalist framework of social work practice. In addition the development of the analytical and practice skills of listening, relationship building, assessment, intervention and evaluation are addressed.

## **THTR101 INTRODUCTION TO THEATER**

*Credits: 3*

**Pre-requisite(s): None**

An exploration of the expressive powers of theater, with an emphasis on reflection, comparison, and analysis of written and performed dramatic works.

## **THTR120 INTRODUCTION TO ACTING I**

*Credits: 3*

**Pre-requisite(s): None**

Students will work on basic acting skills through group as well as individual acting exercises, hands-on script analysis, and scene study with fellow student actors.

## **WLDG101 WELDING FUNDAMENTALS FOR AUTO TECH/DIESEL**

*Credits: 1*

**Pre-requisite(s): None**

This course provides students the basic welding skills needed to adequately and safely make minor repairs to automobiles and diesel powered cars and trucks using the SMAW and GMAW weld processes. Students will also be given instruction on the safe and proper use of an oxy-acetylene cutting torch and plasma cutter.

## **WLDG107 INDUSTRIAL SAFETY FOR WELDING**

*Credits: 2*

**Pre-requisite(s): None**

Safe work practices are paramount in all aspects of industrial work. Students will receive training in each piece of equipment using manufacturers' safety recommendations. Students will learn to identify and follow safe work practices as well as inspections of power equipment (portable & stationary), hand tools and also demonstrate the safe and proper use of each tool. Students will receive State of Montana certification for the operation of a 4500 lb. lift truck. This course will include instruction on how to safely use slings, hitches, rigging hardware, sling stress, hoists, rigging operations and practices.

## **WLDG112 CUTTING PROCESSES**

*Credits: 3*

**Pre-requisite(s): A "C-" or higher in WLDG107**

This course will examine the different cutting processes used in today's welding industry. The cutting processes examined in this course are Oxy Fuel, Plasma Arc and Carbon Arc cutting. Hands on training will be administered throughout this course to ensure that proper technique and safety measures are met with all above mentioned cutting processes.

## **WLDG135 GMAW THEORY AND PRACTICAL APPLICATION**

*Credits: 5*

**Pre-requisite(s): A "C-" or higher WLDG107**

The course starts with a basic understanding of how the GMAW welding processes work, with the concepts of basic electricity, filler metals, and applications. A hands-on welding experience is gained in GMAW, GMAW-Dual Shield, GMAW-P. Using these welding processes in multiple steps, exercises, and welding positions, the student will gain a wide variety of welding knowledge. An American Welding Society D1.1 certification test will be administered using GMAW-Dual shield wire at the end of the course. The instructor reserves the right to add and or delete any requirements, during the courses session.

## **WLDG137 BLUEPRINT READING, LAYOUT, AND BEGINNING FABRICATION**

*Credits: 7*

**Pre-requisite(s): A "C-" or higher WLDG107, WLDG112, WLDG135, WLDG181, and M111T**

This course covers the basics for understanding the reading of blueprints and shop drawings and the use of AWS welding symbols for blueprint reading. With the use of shop drawings students create a list of the required materials. Steel supply books are used as a reference to identify different structural materials. Mathematical calculations will be used to convert a materials list into prices. Labor time is then estimated to create a total bid for the project to be completed. This course also includes the use of formulas to measure volume, length, and weights. This course covers fabrication and layout of different types of welding designs, including multi-gore elbows, transitions, square to rounds, flanges, and other types of dust and emission control fittings using three different methods of layout practices. Students will be required to layout patterns on paper transfer patterns to steel plates and tubing. Students will learn proper identification, care and use of hand tools used in metal fabrication. Using various methods of metal forming using hand and power fabrication equipment combined with various welding processes, students will be assigned

objects to be fabricated. Students will be given extensive hands on training of fabrication machinery to ensure proper and safe usage of machines. Proper housekeeping of the work environment will be discussed and demonstrated.

### **WLDG141 GTAW THEORY AND PRACTICAL APPLICATION**

*Credits: 4*

**Pre-requisite(s): A "C-" or higher in WLDG112, WLDG135, and WLDG181 and M111T**

In this course, students will be given instruction on the use and theory of the Gas Tungsten Arc Welding (GTAW) process. This course will provide thorough instruction regarding proper safety, set up, and welding techniques on material such as: steel, stainless steel, and aluminum using the GTAW process.

### **WLDG151 SHOP PRACTICES**

*Credits: 4*

**Pre-requisite(s): A "C-" or higher in all first semester welding courses, WLDG 117, WLDG 141, and M111T**

This course provides students with a real-life shop environment encountered in today's industry. Emphasis on work ethic, safety, communication and productivity will be a large portion of this course. Students will refine all skills gained throughout previous courses on projects for the community.

### **WLDG181 SMAW THEORY AND PRACTICAL APPLICATION**

*Credits: 5*

**Pre-requisite(s): None**

This course starts with a basic understanding of the stick welding process, including the concepts of basic electricity, filler metals, and applications. A hands-on welding experience is gained through multiple steps and exercises, using multiple welding filler metals and welding positions. Process techniques using various types of mild steel electrodes in the four positions are practiced. An American Welding Society certification can be obtained at the end of the course.

### **WLDG213 PIPE WELDING LAB I**

*Credits: 6*

**Pre-requisite(s): A "C-" or higher in all first year welding courses and M111T.**

This course provides the student explanation on how to set up SMAW equipment for open-root V-groove welds. Explains how to prepare for and make open-root V-groove welds on carbon steep pipe. Provides procedures for making open-root V-groove welds with SMAW equipment on pipe in the 1G-ROTATED 2G, 5G and 6G positions. Provides procedures for making open-root V-groove welds

with FCAW equipment on the pipe in the 1G-ROTATED, 2G, 5G and 6G positions.

### **WLDG227 ADVANCED JOINING PROCESSES THEORY AND PRACTICAL APPLICATION**

*Credits: 6*

**Pre-requisite(s): A "C-" or higher in M111T and all first semester second year courses.**

This course will cover many different advanced joining processes used in today's industry. The following processes will be covered in this course: Submerged Arc Welding (SAW), Brazing, Soldering, Resistance Spot Welding, Orbital TIG Welding, Stud Welding and Engine Drives as well as safety in each of the above listed fields.

### **WLDG245 METAL FABRICATION DESIGN AND CONSTRUCTION**

*Credits: 5*

**Pre-requisite(s): A "C-" or higher in M111T and all first semester second year courses.**

This course is designed to challenge students in a team environment on more complex fabrication and repair job assignments. Students will systematically plan out, order material, and perform repair and fabrication work orders. They will select the proper welding procedures and processes for each job assignment. Although instructors will oversee the job, students are challenged to take on a leadership role with less supervision. In addition, students will be required to identify, maintain and organize all shop tools on a rotational basis.

### **WLDG246 ADVANCED METAL FORMING AND FABRICATION THEORY AND PRACTICAL APPLICATION**

*Credits: 5*

**Pre-requisite(s): A "C-" or higher in all first year welding courses and M111T**

This course is designed to enhance student proficiency in the fabrication environment. Students will use state of the art fabrication equipment in industry today. Fabrication of various objects with an emphasis on accuracy will be part of this course as well as a complete education on repair procedures. Problem solving skills will be a point of emphasis.

## **WLDG257 CUTTING PROCESSES II**

*Credits: 5*

**Pre-requisite(s): A "C-" or higher in all first year welding courses and M111T**

This course is designed to educate students using the latest Computer Numerically Controlled (CNC) automated cutting technology available in industry. Students will use nesting software to import CAD drawings into the CNC machines to perform cuts on various types of metals with an emphasis on accuracy and quality.

## **WLDG298 WELDING INTERNSHIP**

*Credits: 1*

**Pre-requisite(s): A "C-" or higher in WLDG117**

The purpose of this internship is to give students the opportunity for on the job training. Students will use a wide variety of welding skills including but not limited to: shielded metal arc welding, gas metal arc welding, tungsten inert gas welding, oxy-fuel and plasma cutting. Students will also be expected to use the skills they have obtained in blueprint reading and metal fabrication. Students are expected to follow all safety instructions while in the work environment. With the cooperation of the employer, the students will be graded on both their work ethic and skills related to the welding industry.

## **WLDG299 INDUSTRIAL WELDING CAPSTONE**

*Credits: 5*

**Pre-requisite(s): A "C-" or higher in all first semester second year welding courses and M111T**

Students will demonstrate readiness for welding employment through the development and performance of a comprehensive hands-on welding related fabrication project.

## **WRIT096 COLLEGE WRITING LAB**

*Credits: 1*

**Pre-requisite(s): None**

This course reviews the basics of good writing. It emphasizes mastering the components of an essay, as well as the conventions of English grammar, usage, and mechanics.

## **WRIT101 COLLEGE WRITING I**

*Credits: 3*

**Pre-requisite(s): None**

**Co-requisite(s): WRIT 096 if placement score indicates such**

This course provides experience in written expression of ideas in expository prose with emphasis on the development of ideas, awareness of audience, and clarity. The course focuses on the writing process, patterns of

writing, development of ideas, precise expression, critical thinking, and research skills.

## **WRIT121T INTRODUCTION TO TECHNICAL WRITING**

*Credits: 3*

**Pre-requisite(s): None**

**Co-requisite(s): WRIT 096 if placement score indicates such**  
Experience in communication formats typical of technical careers. Emphasis on writing as the craft of the critical thinker, involving analysis of audience, context, and purpose, as well as the ability to locate, synthesize, analyze, organize, and present information effectively.

## **WRIT121T INTRODUCTION TO TECHNICAL WRITING**

*Credits: 3*

**Pre-requisite(s): None**

**Co-requisite(s): WRIT 096 if placement score indicates such**  
Experience in communication formats typical of technical careers. Emphasis on writing as the craft of the critical thinker, involving analysis of audience, context, and purpose, as well as the ability to locate, synthesize, analyze, organize, and present information effectively.

## **WRIT201 COLLEGE WRITING II**

*Credits: 3*

**Pre-requisite(s): A "C-" or higher in WRIT101**

Continued experience in written expression of ideas in expository prose with an emphasis on critical response, argumentation, and research. Areas of study include research methods, evaluating source materials, and formal documentation, critical review and evaluation, and presenting logical, coherent, and forceful arguments.

## **WRIT210 SCIENTIFIC REPORT WRITING**

*Credits: 3*

**Pre-requisite(s): A "C-" or higher in WRIT101 or WRIT121T** This course provides students with the tools to write effective research documents and other documents in the scientific and industrial fields. Topics include the challenges of scientific writing and other workplace writing, summary writing, identifying and correcting common writing problems, completing governmental agency forms, and revising documents for maximum effectiveness. This course will also examine how audience influences a document's style, format, and content.



## Tools

Automotive Technology

Aviation Technology

Diesel Technology

Computer Aided Manufacturing and Machine Tool Technology

Welding: Industrial Welding and Metal Fabrication Tool Set



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# Tools

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Tools are *required* by each student entering Automotive, Aviation Maintenance, Diesel, Computer Aided Manufacturing and Machine Tool, and Welding Technology programs. Students are also required to purchase school-approved shirts and red rags for use in the shops.

## **Ordering Procedure**

Students do not purchase tools through the College. Tool vendors will be available at the College at the beginning of each semester for students who wish to place orders. These tools are sold by the vendors at an educational discount. Tool costs vary depending on the vendor; approximates are average costs. Tools may take several weeks to arrive, and vendors will not deliver without full payment. A commitment sheet in writing from your vendor on the latest possible delivery date is advised before ordering.



*Note: Most tools are available through the Helena College Parts Department located at the Airport Campus*

## Automotive Technology Tool Set

\$2,700 – \$3,700 (Approximately)

1. Tool Chest Roll Cabinet (with lock), 5 drawer minimum
2. Stiff Bladed Putty Knife
3. 1/2 Drive Breaker bar
4. 10” Slip Joint Pliers [water pump]
5. 1/4 Drive Metric Sockets, Shallow 4mm to 15 mm; 13 pc.
6. Battery Service Pliers
7. 1/2 Drive Metric Sockets, Shallow 12 mm to 24 mm
8. Side Post Battery Wrench and Wire Brush
9. 3/8 Metric Sockets, Deep and Shallow 8 mm to 19 mm
10. Top Post Battery Brush
11. 1/2 Drive Standard Sockets, Shallow 1/2 to 1-1/8
12. Reversible Snap Ring Pliers
13. 1/4 Drive Standard Sockets, Deep and Shallow; 3/16 to 9/16 20 pc.
14. 10” Vise Grip Type Pliers
15. 3/8 Standard Sockets, Deep and Shallow 1/4 to 7/8 22 pc.
16. Wire Stripper Cutters 10-20 ga. wire
17. 5/8 and 13/16 Spark Plug Sockets
18. 10 pc. Punch and Chisel set
19. Torx Sockets T8 to T55 11 pc. set
20. 16 oz. Ball Peen Hammer
21. 1/2 Drive Ratchet
22. 32 oz. Ball Peen or Engineer Type Hammer
23. 1/4 Drive Ratchet
24. 16 oz. Dead Blow Soft Face Hammer
25. 3/8 Flex Head Ratchet 46. Hacksaw
26. 3/8 Ratchet
27. Wire Brush
28. 1/2 Drive Extensions 5”, 11”
29. Flashlight
30. 1/4 Drive Extensions 2”, 4”, 6”
31. 12’ Tape Measure
32. 3/8 Drive Extensions 1”, 3”, 6”, 11”
33. Circuit Tester
34. 1/4 Drive Screwdriver Style Handle
35. Radiator Hose Removal Tool
36. Adapters 3/8” to 1/4”; 3/8” to 1/2”; 1/2” to 3/8”
37. 4 pc. Seal Pick Set
38. Universals 1/4”, 3/8”
39. 16” Rolling Head [Heel] Bar
40. Standard Wrenches 3/8” to 1”
41. Inspection Mirror
42. Metric Wrenches 8 mm to 19 mm
43. Magnetic Retrieval Tool
44. Standard Flare Nut Wrenches 1/4” to 13/16”
45. Carbon Gasket Scraper
46. Metric Flare Nut Wrenches 8 mm to 21 mm
47. Ignition Gauge Set [Short Blade .010 through .035]
48. Standard Allen Wrenches 58. Feeler Gauge Set .0015 through .025
49. Metric Allen Wrenches
50. Wire Gap Gauge .044 through .080
51. 12” Adjustable Wrench
52. Spark Plug Gap Gauge [Taper]
53. 8 pc. Screwdriver Set
54. Safety Glasses
55. Ratchet Type Screwdriver
56. Blow Gun
57. 6” Needle Nose pliers
58. Fluorescent Tube Trouble Light with Accessory Plug,
59. 8” Needle Nose pliers 25 ft. cord, minimum
60. 7” Side Cutters
61. 6” Precision Steel Rule with Metric Scales
62. 7” Conventional Pliers [common]
63. 2 Uniform Shirts

## Aviation Maintenance Technology Tool Set

\$2,000 – \$3,000 (Approximately)

Students need to get their tools as soon as possible. The following are the minimum tools required for aviation maintenance student to have in order to take the course. These tools are not provided by the school. Tool Storage (lockable toolbox etc.)

1. 1/4 Drive Bit Adapter (Screw Driver Bit Adapter)
2. OSHA Approved Respirator with Organic Vapor Cartridge
3. Screw Driver Set (Philips and common)
4. Fresh Air Breathing Mask SAS 9813-70 or 71
5. Screw Driver Bits with extra #2 Phillip Bits
6. Dust Mask
7. Pick Set (straight and 90)
8. Safety Glasses/Safety Goggles
9. Feeler Gauges (.008-.035)
10. Hearing Protection (Muff Type)
11. Gasket Scraper (Razor Blade type preferred)
12. Leather Gloves Mechanics/Welding
13. Standard Allen Wrench Set (Hex Key)
14. 4 gb or larger thumb drive
15. Hacksaw with spare Blades
16. Calculator
17. Automatic Center Punch
18. 3 Fine Point Sharpie Markers
19. Tire Air Gauge
20. Digital Multi Meter
21. Tire Valve Core Remover
22. Flash Light
23. Tire Air Chuck
24. Inspection Mirror
25. Air Blower Nozzle (Air Gun, rubber tip preferred)
26. 6 Inch Steel Ruler
27. 8” Flat Mill File (optional)
28. Sliding Combination Square (12 inch)
29. 8” Round “Rat Tail File” (optional)
30. Diagonal Side Cutters
31. 8” or 10” Curved Vixen File (optional)
32. Small Flush Cut, Diagonal Side Cutters
33. File Handle (if not supplied with files)
34. Wire Terminal Crimper (Aviation Grade Ratcheting Type)
35. Needle File Kit
36. Wire Strippers (Aviation Grade)
37. 45 Punch Set (center punch, small chisel, assorted flat)
38. Pliers Set- Needle Nose, Straight Jaw, Channel Lock and Duck Bill Pliers
39. 16 oz. Ball Peen Hammer
40. 6 or 8 Inch Safety Wire Pliers Reversible
41. 16 oz. Soft faced Mallet (dead blow preferred)
42. Snap Ring Pliers (.038, .047, .070, tip size)
43. Dial Caliper (6 inch non-digital)
44. 10” Crescent Wrench
45. Pencil Soldering Iron (pointed tip) (Optional butane)
46. Box End/Open End Wrench Set (Combination Wrench) ¼ to 1 inch including 1 1/32”
47. 3/8” drive, 6-Point Socket Set with Ratchet and Extensions
48. 1/4” Inch Drive, 12 Point Socket Set (Deep and Shallow) with Ratchet, Extensions and Universal Adapter (Fire Tooth Ratchet preferred)
49. 3 Uniform Shirts
50. Flashlight (other than cell phone) \*Updated 3/2020

## Diesel Technology Tool Set

\$3,000 – \$4,000 (Approximately)

1. \*Welding Helmet – added 9/6/19
2. \*Welding Gloves – added 9/6/19
3. \*Chipping Hammer – added 9/6/19
4. Roll Cabinet Tool Box, 7 drawer minimum
5. Stiff Bladed Putty Knife
6. 1/2 Drive Breaker bar
7. 10” Slip Joint Pliers [water pump]
8. 12 pt Drive Metric Sockets, Shallow 4mm to 15 mm; 13 pc.
9. Battery Service Pliers
10. 12 pt Metric Sockets, Deep and Shallow 8 mm to 19 mm
11. Side Post Battery Wrench and Wire Brush
12. 12 pt Drive Standard Sockets, Shallow 1/2 to 1-1/8
13. Top Post Battery Brush
14. 12 pt Drive Standard Sockets, Deep and Shallow; 3/16 to 9/16 20 pc.
15. Reversible Snap Ring Pliers
16. 12 pt Standard Sockets, Deep and Shallow 1/4 to 7/8 22 pc.
17. 10” Vise Grip Type Pliers
18. 5/8 and 13/16 Spark Plug Sockets
19. Wire Stripper Cutters 10-20 ga. wire
20. Torx Sockets T8 to T55 11 pc. set
21. 10 pc. Punch and Chisel set
22. 1/2 Drive Ratchet
23. 16 oz. Ball Peen Hammer
24. 1/4 Drive Ratchet
25. 16 oz. Dead Blow Soft Face Hammer
26. 3/8 Flex Head Ratchet
27. Hacksaw
28. 3/8 Ratchet
29. Wire Brush
30. 1/2 Drive Extensions 5”, 11”
31. Flashlight
32. 1/4 Drive Extensions 2”, 4”, 6”
33. 12’ Tape Measure
34. 3/8 Drive Extensions 1”, 3”, 6”, 11”
35. 1/4 Drive Screwdriver Style Handle
36. Radiator Hose Removal Tool
37. 1/2 Drive Standard Impact Shallow; 3/8 to 1” 12pt
38. 48oz Stubby Sledge Hammer
39. 1/2 Drive Metric Impact Shallow; 10-24MM 12pt
40. 20” Bearing Race Punch
41. 1/2 Drive Air Impact
42. Florescent Drop Light; 25 ft. minimum
43. 3/8 Drive Torque Wrench; 5-75 ft. lbs.
44. 24” Screwdriver Style Prybar
45. Adapters 3/8” to 1/4”; 3/8” to 1/2”; 1/2” to 3/8” 1/2” to 3/4”
46. 4 pc. Seal Pick Set
47. Universals 1/4”, 3/8”
48. 16” Rolling Head [Heel] Bar
49. Standard Wrenches 3/8” to 1”
50. Inspection Mirror
51. Metric Wrenches 10 mm to 19 mm
52. Magnetic Retrieval Tool
53. Standard Flare Nut Wrenches 1/4” to 13/16”
54. Carbon Gasket Scraper
55. Standard Allen Wrenches
56. Ignition Gauge Set [Short Blade .010 through .035]
57. Standard & Metric Allen Sockets
58. Feeler Gauge Set .0015 through .025 angle
59. 12” Adjustable Wrench
60. Wire Gap Gauge .044 through .080
61. 8 pc. Screwdriver Set
62. Ratchet Type Screwdriver
63. Safety Glasses
64. 6” Needle Nose pliers
65. Blow Gun
66. 8” Needle Nose pliers
67. 7” Side Cutters
68. 7” Conventional Pliers [common]
69. 1/2 Deep Impact Sockets 12 pt
70. 1/2 Torque Wrench
71. Multimeter
72. Brake Shoe Tool
73. Brake Slack Adjuster
74. 1/4” torque wrench
75. Adjustable oil filter wrench
76. 2 Uniform Shirts

## Computer Aided Manufacturing and Machine Tool Technology Tool Set –

**\$2,100 (Approximately)**

1. 2 Uniform Shirts
2. Machinists kit (0-1 micrometer and 6" calipers)  
MSC#93071157
3. Allen Wrenches (cluster pack) – metric and  
standard
4. 1" Indicator Dial MSC#76450071
5. Dead Blow Hammer – 1 pound
6. 2" Indicator Dial MSC#76450089
7. Center Punch Set
8. Magnetic Base (Noga) MSC#92257229
9. Mighty Mag Base (magnetic) MSC#06580450
10. 4 pc. Combination Square MSC#60591559
11. De-burring Tool MSC#05751003
12. Double End Edge/Center Finder MSC#03293412
13. Pocket Flashlight
14. Carbide Scribe MSC#7649880
15. Screwdriver Set
16. 6" Rigid Scale, 32nds and 64ths one side/100th on  
flip side MSC#78988136
17. Standard Set Combo Wrenches 3/8" – 1"
18. 6" Flex Scale, 32nds and 64ths one side/100ths on  
slip side MSC#69745974
19. Measuring Tape – 10 foot
20. HSS Tool Bit Blank 3/8" 2 each MSC#02603249
21. HSS Tool Bit Blank 1/2" 2 each  
MSC#02603322
22. Thread Wire set MSC#03293529
23. 6-pc Snap Gauges MSC#06457014
24. Pitch Gauges, inch and metric MSC#01221019 and  
#01221043
25. File Set with Handles MSC#6030488
26. One Set of Parallels
27. File Brush
28. Drills, Fractional, Letters, Numbers
29. Safety Glasses
30. Tool Box – max 26" wide, 20" deep, 37" high  
(minimum height 37" No top boxes)
31. 1-2-3 Blocks MSC#06378012
32. V-Block Set
33. Acme Screw Pitch Gauge Required 2nd semester  
MSC#63326367
34. Carbide Insert Holders – RH turning and threading
35. Carbide Inserts – 2 threading and 2 grooving
36. Test Dial Indicator .0005 res
37. Coaxial Indicator

## **Welding: Industrial Welding and Metal Fabrication Tool Set**

*\$800 (Approximately) Updated 12/11/2020*

### **Safety Equipment: (Harbor Freight/Amazon)**

1. Safety Glasses- Multiple Pairs
2. Steel Toe Boots- Leather

### **Welding Equipment: (General Distributing/American Welding & Gas)**

1. Welding Hood- Auto Darkening
2. Welding Gloves-Leather
3. Welding Jacket- 100% Cotton/Leather Sleeves/ 100 % Leather
4. Welding Cap- 100% Cotton
5. Cutting Goggles- Minimum Shade #5

### **Hand Tools: (Harbor Freight/Amazon)**

- |   |  |
|---|--|
| 1. Standard Allen Wrench Set                | 22. Small Punch Set (Center Punch, Chisel, Pin Punch, and Drift Punch)     |
| 2. Screwdrivers (Both Philips and Flathead) | 23. Three Piece Square Set (Combination Square, centering, and Angle Head) |
| 3. Open end Wrench set up to 3/4"           | 24. Stencil Set (For Metal)  |
| 4. Hand Wire Brushes (Carbon and Stainless) | 25. (2) 8" C-Clamps (Steel)  |
| 5. Roll of Electrical Tape                  | 26. (2) 6" Hand Clamps (Steel)   |
| 6. 8" Slip Joint Pliers                     | 27. 4-1/2" Grinder with Guard  |
| 7. MIG Pliers                               | 28. Knotted Wire Wheel for 4-1/2" Grinder                                  |
| 8. Set of Cleaning Picks                    | 29. Flap Disc for 4-1/2" Grinder   |
| 9. 3/8" Drive Socket Set                    | 30. Sharpies (Black and Silver)  |
| 10. Small Flashlight                        | 31. Scribe (With Magnet)   |
| 11. Carpenters Square                       | 32. Soap Stone   |
| 12. Framing Squares (1 large and 1 small)   | 33. Silver Marking Pencils   |
| 13. 10" Crescent Wrench                     | 34. Fillet Weld Gauges   |
| 14. 25' Tape Measure                        | 35. V-WAC Gauges   |
| 15. Magnetic Torpedo Level                  | 36. Large Pipe Wedge   |
| 16. Ball Peen Hammer                        | 37. Pipe Wrap  |
| 17. Chipping Hammer                         | 38. Construction Calculator (Not Estimator)                                |
| 18. Cutting Tip Cleaner                     | 39. Small Drafting Kit   |
| 19. Friction Lighter (Striker)              | 40. 24" Flex Rule  |
| 20. 4-Piece File Set                        |  |
| 21. USB Flash Drive                         |  |

### **Preferred Tool Vendors:**

1. American Welding & Gas
2. General Distributing
3. Harbor Freight
4. MSC Industrial Supply- (Online)
5. Amazon- (Online)

**STUDENTS ARE EXPECTED TO HAVE TOOLS BY THE END OF THE FIRST WEEK OF CLASS.**



Montana University System



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# Montana University System

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## **Commissioner of Higher Education**

Clayton Christian  
560 North Park Avenue  
P.O. Box 203201  
Helena, MT 59620-3201

## **Board of Regents of Higher Education**

Casey Lozar, Chair, Helena (2018)  
Robert Nystuen, Vice Chair, Kalispell (2022)  
Paul Tuss, Havre (2020)  
Martha Sheehy, Billings (2021)  
Brianne Dugan, Bozeman (2024)  
Joyce Dombrowski, Missoula (2026)  
Amy Sexton, Student Regent, MSU-Billings (2021)  
The Honorable Greg Gianforte, Governor of Montana, Ex-Officio  
Elsie Arntzen, Superintendent of Public Instruction, Ex-Officio

## **THE UNIVERSITY OF MONTANA CAMPUSES**

### **University of Montana – Missoula**

**Missoula College**

**Bitterroot College**

**Montana Tech**

**Highlands College**

### **University of Montana – Western**

**Helena College**

## **MONTANA STATE UNIVERSITY CAMPUSES**

### **Montana State University – Bozeman**

**Gallatin College**

### **Montana State University – Billings**

**City College**

### **Montana State University – Northern**

**Great Falls College**

## **COMMUNITY COLLEGES**

**Dawson Community College**

**Flathead Valley Community College**

**Miles Community College**

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## Helena College Administrators and Faculty

Administrator Profiles  
Helena College Board Members  
Faculty Profiles  
Staff Profiles

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# Administration

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1115 North Roberts  
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Fax: 406-447-6397  
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### Administrator Profiles

#### **Dr. Sandra Bauman, Dean/CEO**

B.A., Montana State University  
M.S., Montana State University Billings  
Ed.D., Montana State University

#### **Michael Reid, Assistant Dean of Administrative Affairs**

A.A., Dixie College  
B.S., Utah State University  
M.B.A., Utah State University

### Division Director Profiles

#### **Tammy Burke, Executive Director of Career Technical Education**

B.S., University of Wyoming, Dietetics  
M.S., University of Wyoming, Kinesiology

#### **Robyn Kiesling, Executive Director of General Education & Transfer**

B.S., Montana State University Billings

#### **Ryan Loomis, Director of Community Engagement & Workforce Development/SBDC**

B.S., University of Montana, Business Management & Marketing  
M.B.A., University of Montana

#### **Sandy Sacry, Director of Nursing Program**

RN, Independence Sanitarium and Hospital  
B.A., Graceland University  
M.S.N., University of Phoenix

---

# Helena College Board Members

---

## CAMPUS ADVISORY BOARD MEMBERS

**Erick Anderson**

President  
Placer Motors

**Lisa Cordingley**

Executive Director  
Helena Education Foundation

**Tiffany Ferguson**

Project Manager  
Northrup Grumman

**Rick Hays**

Retired, Past HC Executive Board Member

**Doug McBroom**

Bureau Chief  
Montana Department of Transportation

**Brian Obert**

Executive Director  
Montana Business Assistance Connection

**Bryan Page**

Bureau Chief, Safety and Health Bureau  
Montana Department of Labor

**Carol Rule**

Assistant Manager  
Helena Job Service

**Gene Walborn**

Deputy Director  
Montana Department of Revenue

## FOUNDATION BOARD MEMBERS (Updated 1/5/2021)

**Gary Rapaport MD - President**

Physician  
Occupational Medicine

**Greg Strizich – Vice President**

President/CEO  
Intrepid Credit Union

**Summer Marston –Treasurer, Member**

Administrative Specialist  
NorthWestern Energy

**Odie Otterstrom**

Financial Consultant  
The Chamberlin Group, Inc.

**Pat Haffey**

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**Armando Oropeza**

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Project Coordinator

**Joel Silverman**

Owner  
Silverman Law Office, PLLC

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**Monica Latham**

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DEQ

**Sam Martin**

Client Support Services  
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## Faculty Profiles

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A.S., Northern Montana College  
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M.B.A., St. Cloud State University

**Dumas, Tod**

*Aviation Maintenance Technology*  
Airframe and PowerPlant License

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M.A., San Francisco State University  
M.A., University of California, Irvine

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Ph.D., Montana State University

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M.A., Montana State University

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ASE Master Certified Technician  
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M.S., Montana State University – Northern

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B.S.N., Creighton University  
M.S.N., The University of Saint Mary

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ASE Master Certification

ASE Light Duty Diesel Certification

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## Notice Concerning Materials in This Catalog

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Helena College's budget is funded through appropriations from the Montana State Legislature and student tuition. It should be understood, therefore, that not all programs described in this catalog may be available because of funding variations. Representations are neither made nor implied that courses or programs available in any given semester will be continued or maintained in subsequent semesters.

While the College will make every effort to provide described courses and programs, the final decision as to their availability rests with the Board of Regents and will be determined by available funds and by the needs of the school. All provisions within this catalog are subject to change without notice.

Pursuant to Title VI and VII of the Civil Rights Act, Title IX of the Education Amendments, Section 504 of the Rehabilitation Act, Executive Order 11246, the Vietnam Veteran's Readjustment Act, and the Montana State Human Rights Act, Helena College announces that it does not discriminate in admission, access to, or conduct of its education programs and activities, nor in its employment policies, on the basis of: race, sex, color, national origin, religion, age, marital or parental status, physical handicap, or mental handicap.

As required by Title IX and Section 504, Helena College shall afford any student, employee, or applicant for admission or employment, the right to file a grievance on grounds of discrimination.

Correspondence should be directed to:

**Human Resource Department**

1115 N. Roberts Street

Helena, MT 59601

(406) 447-6925

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